

STIC Database Tracking Number: 244914

To: JULIE ANNE WATKO
Location: KNX-8A75
Art Unit: 2627
Monday, December 10, 2007

Case Serial Number: 10788863

From: PAMELA REYNOLDS
Location: EIC2600
KNX-8B59 / KNX-8A54
Phone: (571)272-3505

pamela.reynolds@uspto.gov

Search Notes

Dear Examiner Julie Anne Watko:

Please find attached the search results for 10788863. I used the search strategy I sent you to edit, not hearing from you I proceeded. I searched the standard Dialog files, IEEE, IBM TDBs and the internet.

If you need anything else please let me know.

Thank you.



244914

STIC EIC2600

Search Request Form

Today's Date: 12-5-07 Date Needed by: _____ RUSH - SPE signature _____Your Name Pauline Anne WintersAU 2627 Examiner # 77612

Room # _____ Phone _____

Serial # 10 784463

Priority Date _____

Format for Search Results: PAPER EMAIL

Where have you searched?

EAST _____

NPL _____ where - IEEE, ACM, internet, other

DESCRIBE the scope of your request, such as the area of art, novelty, process or method if applicable. Specify the concepts, synonyms, keywords, acronyms, or definitions and the relationship of the concepts to each other. Please attach a copy of the background, abstract, and pertinent claims of the application. **ONLY specifying CLAIM 1 is not enough.**

Case serial number: 10788863

Class / Subclass(es): 360/244.8

Earliest Priority Filing Date: 02/27/2004

Format preferred for results: E-mail

Attachments: No attachment.

Search Topic Information:

I am looking for a material, having a high modulus of elasticity (or coefficient of restitution) > 10 GPa and a damping capacity > 0.02 preferably strong enough to support itself, preferably for use in a disk drive (disc drive, hard drive, HDD) head (slider, transducer, pickup) suspension (load beam, gimbal). 1. (Currently Amended) A head suspension assembly, comprising: a beam component having a front end and a rear end; a hinge component near the rear end of the beam component for connecting to an actuation arm; and a gimbal component near the front end of the main beam section for carrying a transducing head; wherein the hinge component comprises a first structural damping material having a modulus of elasticity greater than approximately 10 gigapascals and a damping capacity greater than approximately 0.02 and the gimbal component comprises a second structural damping material having a modulus of elasticity greater than approximately 10 gigapascals and a damping capacity greater than approximately 0.02.

HEADSUSPENSION ASSEMBLY HAVING A HIGH DAMPING HIGH STIFFNESS COMPONENT

ABSTRACT OF THE DISCLOSURE: A head suspension assembly for carrying a slider assembly in a disk drive has a beam component having a front end and a rear end, a hinge component near the rear end of the beam component for connecting to an actuation means, and a gimbal component near the front end of the main beam section for carrying a transducing head. At least one of the hinge component and the gimbal component is made from a structural damping material having high stiffness and high damping capacity.

Special Instructions and Other Comments:

I will be working at home until approx'y Saturday, so if you get around to the search before then, please execute without waiting for my reply. After that, I will only be available to discuss on Mondays and Fridays.

STIC Searcher Parish Reynolds Phone _____Date picked up 12-6-07 Date completed 12-10-07DATABASES Searched _____ TEXT ☒ LITIGATION _____

OTHER _____



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(c) 2007 RAPRA Technology Ltd

File 335:Ceramic Abstracts/World Ceramics Abstracts 1966-2007/Oct
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Set	Items	Description
S1	1131	GIGAPASCAL??
S2	69	S1(3N)(10 OR TEN)
S3	7067	DAMP?(3N)(CAPACIT? OR CAPABILIT?)
S4	587	GREATER(1W)0()02
S5	5399	HIGH()STIFFNESS
S6	10748	HIGH(3N)DAMP???
S7	39849	(MODULUS OR MODULI OR YOUNG)(3N)ELASTICITY
S8	1956257	COEFFICIENT? OR RESTITUTION
S9	46311	(DISC OR DISK OR HARD)(3N)DRIVE?? OR HDD
S10	1115	(HEAD OR SLIDER OR TRANSDUCER OR PICKUP)(3N)SUSPENSION
S11	3685	GIMBAL
S12	11782	DAMPING(3N)MATERIAL??
S13	346747	POLYIMIDE? OR POLYAMIDE? OR POLYURETHANE?

S14 634428 EPOXY()RESIN OR POLYETHER()URETHANE? OR POLYETHERURETHANE -
OR RUBBER OR SILICONE()RUBBER OR POLYVINYLCHLORIDE? OR POLYVI-
NYL()CHLORIDE? OR POLYBUTADIENE?
S15 873082 PI OR PVC OR PU
S16 274795 STAINLESS()STEEL
S17 713338 ALUMINUM
S18 5 ZETA()0()02
S19 12 QUIET()STEEL OR STAR()SILENT()STEEL
S20 12166 AU=(SASSINE, J? OR BHATTACHARYA, S? OR HUTCHINSON, A? OR L-
IMMER, J? OR SASSINE J? OR BHATTACHARYA S? OR HUTCHINSON A? OR
LIMMER J?)
S21 402 LOAD()BEAM
S22 0 S2 AND (S4 OR S18)
S23 3 S2 AND S7
S24 3 RD S23 (unique items)
S25 64 S9 AND S10 AND S11
S26 0 S25 AND (S3 OR S12)
S27 1 S25 AND S5
S28 1 S27 NOT S24
S29 0 S20 AND (S3 OR S6 OR S12)
S30 0 S20 AND S1
S31 311 S20 AND S13:S15
S32 0 S31 AND S16
S33 2 S31 AND S17
S34 2 RD S33 (unique items)
S35 2 S34 NOT (S27 OR S24)
S36 7 S2 AND S8
S37 7 S36 NOT (S34 OR S27 OR S24)
S38 4 RD S37 (unique items)
S39 4 RD S18 (unique items)
S40 12 RD S19 (unique items)
S41 2 S40 NOT (AUTOMOBILE? OR CAR?? OR AUTOMOTIVE)
S42 1108 S12 AND S13:S15
S43 4 S42 AND (S9 OR S10 OR S11)
S44 4 S43 NOT (S36 OR S34 OR S27 OR S24)
S45 4 RD S44 (unique items)
S46 3970 S7 AND S8
S47 29 S46 AND (S3 OR S6 OR S12 OR S5)
S48 29 S47 NOT (S43 OR S36 OR S34 OR S27 OR S24)
S49 26 S48 NOT PY=>2005
S50 1 S5 AND S6 AND (S9 OR S10 OR S11)
S51 1 S50 NOT (S47 OR S43 OR S36 OR S34 OR S27 OR S24)

24/3,K/1 (Item 1 from file: 6)
DIALOG(R)File 6:NTIS
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1690064 NTIS Accession Number: N92-33666/8
Electron-Beam Processing of Advanced Composites
(Final Report)
Saunders, C. B. ; Lopata, V. J. ; Kremers, W. ; Mcdougall, T. E. ;
Tateishi, M.
Atomic Energy of Canada Ltd., Pinawa (Manitoba).
Corp. Source Codes: 003443000; A7909905
Report No.: DREP-91-29; CTN-92-60595
Dec 91 29p
Languages: English
Journal Announcement: GRAI9303; STAR3024
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customers); (703)605-6000 (other countries); fax at (703)321-8547; and
email at orders@ntis.fedworld.gov. NTIS is located at 5285 Port Royal Road,
Springfield, VA, 22161, USA.
NTIS Prices: PC A03/MF A01

... were measured. The flexural moduli of the composites were found to be
as much as 10 gigapascals higher when using high dose rate EB curing
than low dose rate x-rays. The...
Descriptors: *Acrylates; *Curing; *Electron beams; *Resin matrix
composites; Glass transition temperature; Modulus of elasticity

24/3,K/2 (Item 1 from file: 99)
DIALOG(R)File 99:Wilson Appl. Sci & Tech Abs
(c) 2007 The HW Wilson Co. All rts. reserv.

2544426 H.W. WILSON RECORD NUMBER: BAST98066063
Ultrasonic shear wave velocities of MgSiO₃ perovskite at 8 GPa and 800 K
and lower mantle composition
Sinelnikov, Yegor D; Chen, Ganglin; Neuville, Daniel R
Science v. 281 no5377 (July 31 1998) p. 677-9
DOCUMENT TYPE: Feature Article ISSN: 0036-8075

...ABSTRACT: minus] 0.4 and (dG/dT)_p = -2.9 [plus or minus] 0.3 [times]
10⁻² gigapascals per kelvin. Combining these derivatives with the
derivatives that were measured for the bulk modulus...

DESCRIPTORS: ... Modulus of elasticity --;

24/3,K/3 (Item 2 from file: 99)
DIALOG(R)File 99:Wilson Appl. Sci & Tech Abs
(c) 2007 The HW Wilson Co. All rts. reserv.

2052333 H.W. WILSON RECORD NUMBER: BAST94065276
Strength of diamond
Weidner, Donald J; Wang, Yanbin; Vaughan, Michael T
Science v. 266 (Oct. 21 1994) p. 419-22
DOCUMENT TYPE: Feature Article ISSN: 0036-8075

ABSTRACT: The yield strength of diamond is measured under a pressure of
10 gigapascals at temperatures up to 1550[degree]C by the analysis of
x-ray peak shapes...

DESCRIPTORS: ... Modulus of elasticity --;
?

28/3,K/1 (Item 1 from file: 95)
DIALOG(R)File 95:TEME-Technology & Management
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01038362 E96100559212

Development of a magnetic head suspension system for high-speed seeking performance

(Entwicklung einer magnetischen Kopf-Aufhaengung fuer hohe Suchgeschwindigkeiten bei Festplatten)

Utsunomiya, M; Hashimoto, M; Kajitani, H

NEC, J

NEC Research and Development, v37, n3, pp369-381, 1996

Document type: journal article Language: English

Record type: Abstract

ISSN: 0547-051X

Development of a magnetic head suspension system for high-speed seeking performance

ABSTRACT:

...higher areal recording density, together with reliable head-disk interface, a novel high performance magnetic head suspension system has been developed. The new suspension consists of a spiral-shaped gimbal spring and a load beam with reverse rails. The characteristics of the developed suspension system...

...numerical simulations and experiments. It has been confirmed that an ideal suspension model shows both high stiffness for high-speed seek motion and compliance for constant flying height. Dynamic analysis for the

...

DESCRIPTORS: HARD DISCS; HARD DISC DRIVES ; MAGNETIC HEADS; MOUNTING BRACKET; BIT DENSITY; EXPERIMENTAL PLANTS; EXPERIMENTAL RESULTS; THEORETICAL RESULT; NUMERICAL METHOD; COMPUTERIZED...

?

35/3,K/1 (Item 1 from file: 34)
DIALOG(R)File 34:SciSearch(R) Cited Ref Sci
(c) 2007 The Thomson Corp. All rts. reserv.

01554430 Genuine Article#: HG901 No. References: 53

Title: STUDIES ON BIS(CATECHOLATO)IRON(III) COMPLEXES - STRUCTURE AND
BONDING IN MEMBERS OF THE FE(BPY) (CL4SQ) (CL4CAT)/FE(BPY) (CL4CAT)2-
REDOX COUPLE

Author(s): DING ZR; BHATTACHARYA S ; MCCUSKER JK; HAGEN PM; HENDRICKSON DN
; PIERPONT CG

Corporate Source: UNIV COLORADO,DEPT CHEM & BIOCHEM/BOULDER//CO/80309; UNIV
COLORADO,DEPT CHEM & BIOCHEM/BOULDER//CO/80309; UNIV CALIF SAN
DIEGO,DEPT CHEM/LA JOLLA//CA/92093

Journal: INORGANIC CHEMISTRY, 1992, V31, N5 (MAR 4), P870-877

Language: ENGLISH Document Type: ARTICLE (Abstract Available)

Author(s): DING ZR; BHATTACHARYA S ; MCCUSKER JK; HAGEN PM; HENDRICKSON DN
; PIERPONT CG

...Abstract: related chromium series. A feature of interest in this
analysis is that while the catecholate pi -levels of Fe(bpy)(Cat)2-
lie lower in energy than the metal 3d levels...

...Research Fronts: 001 (DISSOLUTION KINETICS OF MINERALS; COORDINATION
CHEMISTRY AT THE SOLID WATER INTERFACE; SEMIQUINONE COMPLEXES;
AMORPHOUS ALUMINUM HYDROXIDE; ION ADSORPTION)
90-3473 001 (TRANSFERRIN RECEPTOR EXPRESSION; IRON ACQUISITION;
OUTER-MEMBRANE PROTEINS IN...

35/3,K/2 (Item 1 from file: 99)
DIALOG(R)File 99:Wilson Appl. Sci & Tech Abs
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1337553 H.W. WILSON RECORD NUMBER: BAST96030790

MS sealants: a comparative study of performance properties

Hutchinson, Allan ; Pagliuca, Antonio
Adhesives Age v. 39 (Apr. '96) p. 16-18+

DOCUMENT TYPE: Feature Article ISSN: 0001-821X

Hutchinson, Allan ;

...ABSTRACT: the most difficult movement applications are evaluated. In
particular, the performances of a one-part polyurethane , a neutral cure
silicone, and a new technology MS sealant were compared. The MS Polymer...

...silyl-terminated polyether, was the MS sealant. The 3 sealants were
analyzed on an anodized aluminum substrate and a cement mortar concrete
substrate. The results of the tests indicated that the...

?

38/3,K/1 (Item 1 from file: 2)

DIALOG(R)File 2:INSPEC

(c) 2007 Institution of Electrical Engineers. All rts. reserv.

08292949 INSPEC Abstract Number: A2002-14-6630H-006

Title: Protonic diffusion in high-pressure ice VII

Author(s): Katoh, E.; Yamawaki, H.; Fujihisa, H.; Sakashita, M.; Aoki, K.

Author Affiliation: Nat. Inst. of Adv. Ind. Sci. & Technol., Tsukuba, Japan

Journal: Science vol.295, no.5558 p.1264-6

Publisher: American Assoc. Adv. Sci,

Publication Date: 15 Feb. 2002 Country of Publication: USA

CODEN: SCIEAS ISSN: 0036-8075

SICI: 0036-8075(20020215)295:5558L.1264:PDHP;1-X

Material Identity Number: S015-2002-008

U.S. Copyright Clearance Center Code: 0036-8075/02/\$8.00

DOI: 10.1126/science.1067746

Language: English

Subfile: A

Copyright 2002, IEE

...Abstract: that protonic diffusion will dominate at high pressures in ice. We measured the protonic diffusion coefficient for the highest temperature molecular phase of ice VII at 400 kelvin over its entire...

...from 10/sup -17/ to 10/sup -15/ square meters per second at pressures of 10 to 63 gigapascals. The diffusion coefficients extrapolated to high temperatures close to the ice VII melting curve were less by a...

...Identifiers: diffusion coefficients ;

38/3,K/2 (Item 1 from file: 95)

DIALOG(R)File 95:TEME-Technology & Management

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02073017 20060308589

Optical properties of wurtzite and rock-salt ZnO under pressure

Segura, A; Sans, JA; Manjon, FJ; Mari, B; Munoz, A; Herrera-Cabrera, MJ

Instituto de Ciencia de Materiales, Universidad de Valencia, ES

Microelectronics Journal, v36, n10, pp928-932, 2005

Document type: journal article Language: English

Record type: Abstract

ISSN: 0959-8324

ABSTRACT:

...2GPa. The absorption tail of the fundamental gap, as measured in monocrystals, exhibits a pressure coefficient of 24.5+or-2meV/GPa. The evolution under pressure of the full absorption edge of the wurtzite phase is studied with thin film samples, yielding a slightly lower pressure coefficient (23.0+or-0.5meV/GPa for the A-B exciton). Rock-salt ZnO is...

IDENTIFIERS: DICHTEFUNKTIONSTHEORIE; BERECHNUNG ELEKTRONISCHER STRUKTUREN; 10 GIGAPASCAL BEREICH; Elektronische Struktur; Energieluecke

38/3,K/3 (Item 2 from file: 95)

DIALOG(R)File 95:TEME-Technology & Management

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01766177 20030511162

Pressure dependence of photoluminescence spectra of self-assembled InAs/GaAs quantum dots

Manjon, FJ; Goni, AR; Syassen, K; Heinrichsdorff, F; Thomsen, C
Max-Planck-Inst. f. Festkoerperforsch., Stuttgart, D
Physica Status Solidi (B) - Basic Research, v235, n2, pp496-500, 2003
Document type: journal article Language: English
Record type: Abstract
ISSN: 0370-1972

ABSTRACT:

...state (65 meV/GPa) and of the new broad band (69 meV/GPa). These pressure coefficients are 20% and 40% lower than those reported for dots of less than half the...

...for the wetting layer, respectively. Our results point to a systematic reduction of the pressure coefficient of the InAs QDs with the increase of the dot height.

...DESCRIPTORS: COMPOUNDS; PHOTOLUMINESCENCE; POLISHING; SEMICONDUCTOR QUANTUM DOTS; SPECTRAL LINE SHIFT; WETTING; PRESSURE DEPENDENCE; HYDROSTATIC PRESSURE; PRESSURE COEFFICIENT ; INDIUM ARSENIDE
IDENTIFIERS: HOCHDRUCKEFFEKT; SELBSTMONTAGE; PHOTOLUMINESZENZSPEKTRUM; ZWEIDIMENSIONALE MONOLAGE; 10 GIGAPASCAL BEREICH; Anregungszustand; Galliumarsenid

38/3,K/4 (Item 3 from file: 95)
DIALOG(R)File 95:TEME-Technology & Management
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01766175 20030511164

Electronic structure and optical properties of CdTe rock-salt high pressure phase

Guder, HS; Gilliland, S; Sans, JA; Segura, A; Gonzalez, J; Mora, I; Munoz, V; Munoz, A

Dept. de Fisica Aplicada, Univ. de Valencia, E

Physica Status Solidi (B) - Basic Research, v235, n2, pp509-513, 2003

Document type: journal article Language: English

Record type: Abstract

ISSN: 0370-1972

ABSTRACT:

...semimetal or a low gap semiconductor. Band filling effects lower the band-to-band absorption coefficient and give rise to a "transparency" range, whose upper energy side is assigned to the direct transition at the Gamma point, on the basis of its pressure coefficient. The shrinking and disappearance of the transparency region, along with a large increase of the...

DESCRIPTORS: ABSORPTION COEFFICIENT ; BAND STRUCTURE; CADMIUM COMPOUNDS; 3 5 COMPOUNDS; SEMICONDUCTOR EPITAXIAL LAYERS; OPTICAL TRANSPARENCY; ULTRAVIOLET SPECTRUM; VISIBLE SPECTRA; ELECTRONIC STRUCTURE; OPTICAL PROPERTIES; LIGHT ABSORPTION; REFLECTING POWER; LIGHT REFLECTION; ABSORPTION SPECTRUM; METALLOIDES; PRESSURE COEFFICIENT ; PHASE TRANSITION; CADMIUM TELLURIDE; SOLID SOLID INTERFACE

IDENTIFIERS: DICHTEFUNKTIONSTHEORIE; HOCHDRUCK FESTKOERPERPHASENUMWANDLUNG; HOCHDRUCKPHASE; FREIER LADUNGSTRAEGER; LADUNGSTRAEGERABSORPTION; 20 GIGAPASCAL BEREICH; 10 GIGAPASCAL BEREICH; Absorptionsgrad; Bandstruktur

?

39/3,K/1 (Item 1 from file: 6)
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1473557 NTIS Accession Number: N89-30007/3

Calculation of Transformed Fraction Using Resistivity Data: A Comparison of Various Conductivity Models

Mohan, M. ; Singh, A. K.

National Aeronautical Lab., Bangalore (India).

Corp. Source Codes: 019037000; NC157871

Sponsor: National Aeronautics and Space Administration, Washington, DC.

Report No.: PD-MT-8911

May 89 15p

Languages: English

Journal Announcement: GRAI9003; STAR2724

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NTIS Prices: PC A03/MF A01

... zeta, for titanium, as calculated from the different conductivity models lie within 14 percent at $\text{zeta} = 0.02$, 7 percent at $\text{zeta} = 0.5$ and 0.5 percent at $\text{zeta} = 0.95$. The...

39/3,K/2 (Item 2 from file: 6)
DIALOG(R)File 6:NTIS
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0166933 NTIS Accession Number: AD-677 064/XAB

Muon Polarization in Neutral-Kaon(3) Decay

(Technical rept)

Longo, M. J. ; Young, K. K. ; Helland, J. A.

Michigan Univ Ann Arbor Dept of Physics

Corp. Source Codes: 228720

Report No.: TR-33; 03106-33-T

Sep 68 69p

Journal Announcement: USGRDR6901

Order this product from NTIS by: phone at 1-800-553-NTIS (U.S. customers); (703)605-6000 (other countries); fax at (703)321-8547; and email at orders@ntis.fedworld.gov. NTIS is located at 5285 Port Royal Road, Springfield, VA, 22161, USA.

NTIS Prices: PC A04/MF A01

...ratio $\text{zeta} = f-/f+$ was $\text{Re } \text{zeta} = -1.81 + 0.50$ or -0.26 , $\text{Im } \text{zeta} = -0.02$ plus or minus .08, $\text{Arg } (\text{zeta}) - \pi = 0.6$ plus or minus 2.6 deg...

39/3,K/3 (Item 1 from file: 34)
DIALOG(R)File 34:SciSearch(R) Cited Ref Sci
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05509873 Genuine Article#: WD277 No. References: 65

Title: The numerical simulation of non-supercell tornadogenesis .1.

Initiation and evolution of pretornadic misocyclone circulations along a dry outflow boundary

Author(s): Lee BD (REPRINT) ; Wilhelmson RB

Corporate Source: UNIV ILLINOIS,DEPT ATMOSPHER SCI, 105 S GREGORY

AVE/URBANA//IL/61801 (REPRINT); UNIV ILLINOIS,NATL CTR SUPERCOMP

APPLICAT/URBANA//IL/61801; UNIV ILLINOIS, DEPT ATMOSPHER
SCI/URBANA//IL/61801

Journal: JOURNAL OF THE ATMOSPHERIC SCIENCES, 1997, V54, N1 (JAN 1), P32-60
ISSN: 0022-4928 Publication date: 19970101
Publisher: AMER METEOROLOGICAL SOC, 45 BEACON ST, BOSTON, MA 02108-3693
Language: English Document Type: ARTICLE (ABSTRACT AVAILABLE)

...Abstract: outflow head, 2) substantial across-front horizontal shear
leading to a strong vertical vortex sheet ($\zeta > 0.02 \text{ s}^{-1}$)
that evolved into vigorous mesocyclone centers, and 3) an environment
of neutral or...

39/3,K/4 (Item 1 from file: 144)
DIALOG(R)File 144:Pascal
(c) 2007 INIST/CNRS. All rights reserved.

16908434 PASCAL No.: 04-0571657
Short-range NN properties in the processes $pd \rightarrow dp$ and $pd \rightarrow pp$ SUP n
Refereed and selected contributions from International Conference on
Quark Nuclear Physics, QNP2002, June 9-14, 2002, Juelich, Germany
UZIYOV Yu N; KOMAROV V I; RATHMANN F; SEYFARTH H
ELSTER Charlotte, ed; SPETH Josef, ed; WALCHER Thomas, ed
Kazakh National University, 480078 Almaty, Kazakhstan; Laboratory of
Nuclear Problems, Joint Institute for Nuclear Research, Dubna, 141980,
Russia; Institut fuer Kernphysik, Forschungszentrum Juelich, 52425 Juelich,
Germany
Institute of Nuclear Physics (IKP), Germany; University of Bonn, Bonn,
Germany; University of Mainz, Mainz, Germany
QNP2002: Quark Nuclear Physics. International Conference (Juelich DEU)
2002-06-09
Journal: The European physical journal. A, hadrons and nuclei, 2003, 18
(2-3) 317-319
Language: English

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... largely model-independent way. depends on the dynamics of the pd
interaction. We find here $\zeta = 0.02$ and show that the smallness of
this value may point toward softness of the deuteron...
?

41/3,K/1 (Item 1 from file: 65)
DIALOG(R)File 65:Inside Conferences
(c) 2007 BLDSC all rts. reserv. All rts. reserv.

00191185 INSIDE CONFERENCE ITEM ID: CN001919878

Finding a Voice for Quiet Steel

Tenley, G.

CONFERENCE: Pipeline conference

PROCEEDINGS OF THE API PIPELINE CONFERENCE, 1993 P: 226-232

American Petroleum Institute, 1993

LANGUAGE: English DOCUMENT TYPE: Conference Papers

CONFERENCE SPONSOR: American Petroleum Institute

CONFERENCE LOCATION: Dallas, TX

CONFERENCE DATE: Apr 1993 (199304)

Finding a Voice for Quiet Steel

41/3,K/2 (Item 1 from file: 36)
DIALOG(R)File 36:MetalBase
(c) 2007 The Thomson Corporation. All rts. reserv.

0004248544 IP Accession No.: 222717

Weldability of a Quiet Steel conductive laminate.

Author: KUO M; ORSETTE C J; DICKINSON R C

MSC INC; ROMAN ENGINEERING SERVICES INC

2002

In: Sheet Metal Welding X. Proceedings, Conference, Sterling Heights, Michigan, 15-17 May 2002. Chairman: M.Karagoulis. Publ: Sterling Heights, MI 48310, USA; American Welding Society (Detroit Section); 2002. Session 3. Resistance Spot Weldability. Paper 3.3. 15pp. 8 fig., 8 tab., 16 ref.,

2002

Avail.: Yes

Country of Publication: USA

Language: English

Weldability of a Quiet Steel conductive laminate.

...Abstract: study was carried out to establish a process window for the resistance spot welding of " Quiet Steel ", a vibration-damped steel based laminate system (steel-polymer-steel). Welding was carried out using stacked sheets of Quiet Steel sheets of thickness 1.19-1.21 mm with cold rolled steel sheets of thickness...

?

45/3,K/1 (Item 1 from file: 8)
DIALOG(R)File 8: Ei Compendex(R)
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09156697 E.I. No: EIP02417129000

Title: Proceedings of SPIE: Smart structures and materials 2002 - Damping and isolation

Author: Agnes, G.S. (Ed.)

Conference Title: Smart Structures and Materials 2002: Damping and Isolation

Conference Location: San Diego, CA, United States Conference Date: 20020318-20020320

E.I. Conference No.: 59834

Source: Proceedings of SPIE - The International Society for Optical Engineering v 4697 2002. 409p

Publication Year: 2002

CODEN: PSISDG ISSN: 0277-786X

Language: English

Title: Proceedings of SPIE: Smart structures and materials 2002 - Damping and isolation

Abstract: The proceedings contains 39 papers from the conference on SPIE: Smart Structures and Materials 2002- Damping and Isolation. The topics discussed include: whole-spacecraft shock isolation system; revised modal strain energy...

...analysis of viscoelastic damping treated structures; dynamics analysis of constrained layer damping treated covers for hard disk drives ; dynamically tuned shroud for gun barrel vibration attenuation; remote dynamic absorber; control of vibration and...

...auxetic core; optimum design of hybrid piezoelectric damping system for flexible structures; and characteristics of rubber used in seismic isolation by digital and thermal image analysis. (Edited abstract)

Identifiers: Spacecraft vibration protection; Adaptive inflatable tubes; Damped structures; Aeroelastic instabilities; Model strain energy methods; Hard disk drives (HDD); Cellular structures; Dynamic vibration absorbers (DVA); EiRev

45/3,K/2 (Item 1 from file: 323)
DIALOG(R)File 323:RAPRA Rubber & Plastics
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00923014

TITLE: NEW NAME REFLECTS BFS TECH CENTER'S DIVERSITY

AUTHOR(S): Meyer B

SOURCE: Rubber and Plastics News; 34, No.6, 18th Oct.2004, p.6

ISSN: 0300-6123

JOURNAL ANNOUNCEMENT: 200412 RAPRA UPDATE: 200423

DOCUMENT TYPE: Journal Article

LANGUAGE: English

SUBFILE: (R) RAPRA

...ABSTRACT: the centre, other areas include materials for air springs, applications of rheological fluids and high- damping materials used in Japan in DVD and compact disc drives for cars.

DESCRIPTORS: AIR SPRING; COMPANIES; COMPANY; DAMPING; DEVELOPMENT; DISC DRIVE ; DISK DRIVE ; ELASTOMER; ENERGY ABSORPTION; HYSTERESIS; MECHANICAL PROPERTIES; NANOTECHNOLOGY; NON-TIRE; NON-TYRE; PRODUCT DEVELOPMENT; PROPERTIES; RESEARCH; ROLLING RESISTANCE; RUBBER ; SPRING

; TIRE; TYRE; VIBRATION DAMPING

45/3,K/3 (Item 2 from file: 323)
DIALOG(R)File 323:RAPRA Rubber & Plastics
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00552117

TITLE: DURABLE URETHANE

SOURCE: Rubber World; 212, No.1, April 1995, p.54

ISSN: 0035-9572

CODEN: RVBWAQ JOURNAL ANNOUNCEMENT: 199508 RAPRA UPDATE: 199515

DOCUMENT TYPE: Journal Article

LANGUAGE: English

SUBFILE: (R) RAPRA

ABSTRACT: It is briefly reported that Isoloss HD PU elastomer, a proprietary damping and isolation material, can effectively control unwanted mechanical energy in applications that range from shock control in miniature 2.5 inch computer disc drives to noise and vibration reduction in industrial assembly equipment. Isoloss HD from E-A-R...

...SUBJECT HEADING (RAPRA): PU elastomers

DESCRIPTORS: ASSEMBLY; BUMPER; BUSHING; COMPANY; COMPRESSION SET; COMPUTER; CREEP RESISTANCE; DATA; DIMENSIONAL STABILITY; DISC DRIVE; ELASTOMER; ENERGY ABSORPTION; ENVIRONMENTAL RESISTANCE; GASKET; GROMMET; INDUSTRIAL APPLICATION; LOADING; MACHINERY; MECHANICAL PROPERTIES; MEDICAL EQUIPMENT; MOUNTING; NOISE REDUCTION; OFFICE EQUIPMENT; POLYURETHANE ELASTOMER; PRODUCT ANNOUNCEMENT; PU ELASTOMER; RESILIENCE; RUBBER; SANDWICH; SEAL; SHORT ITEM; STRENGTH; TEMPERATURE RANGE; VIBRATION DAMPING; VIBRATION ISOLATION

45/3,K/4 (Item 3 from file: 323)
DIALOG(R)File 323:RAPRA Rubber & Plastics
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00548222

TITLE: URETHANE

SOURCE: Rubber World; 311, No.6, March 1995, p.64

ISSN: 0035-9572

CODEN: RVBWAQ JOURNAL ANNOUNCEMENT: 199507 RAPRA UPDATE: 199512

DOCUMENT TYPE: Journal Article

LANGUAGE: English

SUBFILE: (R) RAPRA

ABSTRACT: It is briefly reported that E-A-R Specialty Composites has introduced Isoloss HD PU elastomer, a proprietary damping and isolation material that is said to effectively control unwanted mechanical energy in applications that range from shock control in miniature 2.5-inch computer disc drives to noise and vibration reduction in industrial assembly equipment. Isoloss HD urethane is said to...

...SUBJECT HEADING (RAPRA): PU elastomers

...DESCRIPTORS: BUSHING; BUSINESS MACHINE; CHEMICAL RESISTANCE; COMPANY; COMPLIANCE; COMPRESSION SET; COMPUTER; CREEP RESISTANCE; DATA; DIMENSIONAL STABILITY; DISC DRIVE; ELASTOMER; ENERGY ABSORPTION; GASKET; GROMMET; INDUSTRIAL APPLICATION; ISOLATOR; MACHINERY; MECHANICAL PROPERTIES; MEDICAL EQUIPMENT; OZONE RESISTANCE; POLYURETHANE ELASTOMER; PRODUCT ANNOUNCEMENT; PU ELASTOMER;

49/3,K/1 (Item 1 from file: 2)

DIALOG(R)File 2:INSPEC

(c) 2007 Institution of Electrical Engineers. All rts. reserv.

05920074 INSPEC Abstract Number: A9509-8140J-006

Title: Physical and mechanical properties and the structure of as-quenched Ti-Ni-Al alloys

Author(s): Matlakhova, L.A.; Fedotov, S.G.; Pekhtereva, N.N.

Journal: Izvestiya Akademii Nauk SSSR, Metally no.3 p.108-13

Publication Date: 1994 Country of Publication: Russia

CODEN: IZNMAQ ISSN: 0568-5303

Translated in: Russian Metallurgy no.3 p.91-5

Publication Date: 1994 Country of Publication: USA

CODEN: RMLYAQ ISSN: 0036-0295

U.S. Copyright Clearance Center Code: 0036-0295/94/\$50.00

Language: English

Subfile: A

Copyright 1995, IEE

Abstract: The dependence of the modulus of normal elasticity E, shear modulus G, and logarithmic damping coefficient Q on the concentration and structure of as-quenched alloys of the system Ti-Ni...

... concentration is given in weight %). The alloys with the martensite alpha ' (a")-phase structure display high damping properties. The beta -phase considerably deteriorates these properties. Addition of Al up to 3% expands...

...Identifiers: logarithmic damping coefficient ;

49/3,K/2 (Item 2 from file: 2)

DIALOG(R)File 2:INSPEC

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05912754 INSPEC Abstract Number: A9508-8140N-026

Title: Fatigue effect on the dynamic properties of CFRP composites

Author(s): Vellios, L.; Kostopoulos, V.; Paipetis, S.A.

Author Affiliation: Appl. Mech. Lab., Patras Univ., Greece

Journal: Advanced Composites Letters vol.3, no.4 p.145-50

Publication Date: 1994 Country of Publication: UK

CODEN: ACLEEEJ ISSN: 0963-6935

Language: English

Subfile: A

Copyright 1995, IEE

Abstract: Damage developing during fatigue of composite laminates affects both dynamic modulus of elasticity and damping coefficient of the material . It has been shown that the effect of fatigue on the damping coefficient is of particular importance. The damping variation could be used to characterise the damage state...

... relating damage with damping was developed to correlate damage development to mechanical response. The damping coefficients of the composite of the fatigue test were measured at various stages, using the flexural...

49/3,K/3 (Item 3 from file: 2)

DIALOG(R)File 2:INSPEC

(c) 2007 Institution of Electrical Engineers. All rts. reserv.

0000610532 INSPEC Abstract Number: 1963A01216

Title: The damping capacity of strontium

Author(s): Dashkovskii, A.I.; Savitskii, E.M.

Journal: Fizika Metallov i Metallovedenie 11 5 p.811-812

Publication Date: May 1961 Country of Publication: USSR

Translated in: Physics of Metals and Metallography p.153-154

Publication Date: 1961 Country of Publication: UK

Language: Russian

Subfile: A

Copyright 2004, IEE

Title: The damping capacity of strontium

Abstract: Experiments are reported on the temperature dependence of the damping capacity (I) and shear modulus of elasticity (II) for strontium rods (3 mm diameter and 280 mm long; containing as impurities Fe ...

... increases. At 620(deg), I drops abruptly and II is also reduced, while the temperature coefficient varies. On cooling, the curves for I and II have exactly the same course as...

49/3,K/4 (Item 1 from file: 6)

DIALOG(R)File 6:NTIS

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1612636 NTIS Accession Number: AD-A241 311/0

Proceedings of Damping '91, Held in San Diego, California on February 13-15, 1991. Volume 1

(Final rept. Feb 89-Feb 91)

Wright Lab., Wright-Patterson AFB, OH.

Corp. Source Codes: 101228000; 422730

Report No.: WL-TR-91-3078-VOL-1

Aug 91 393p

Languages: English Document Type: Conference proceeding

Journal Announcement: GRAI9203

See also Volume 2, AD-A241 312.

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NTIS Prices: PC A17/MF A04

... test article), Active damping of a cantilever beam, and Large space structure passive electrodynamic dampers; Damping materials and measurements; and Viscoelastic materials.

Identifiers: *Symposia; Beams(Structural); Modulus of elasticity ; Composite structures; Trusses; Damping materials ; Efficiency; Viscoelastic materials ; Optimization; Coefficients ; Foreign technology; Japan; NTISDODXA

49/3,K/5 (Item 2 from file: 6)

DIALOG(R)File 6:NTIS

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1580438 NTIS Accession Number: AD-A233 197/3

Passive Vibration Damping

(Final technical rept. 1 Jan-31 Dec 90)

Kurtz, S. K. ; Yoshikawa, S.
Pennsylvania State Univ., University Park. Materials Research Lab.
Corp. Source Codes: 009222082; 220750

Jan 91 48p

Languages: English

Journal Announcement: GRAI9116

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NTIS Prices: PC A03/MF A01

... 70 to 90 GPa measured using an electrical resonance technique. In order to utilize piezoelectric damping effect for structural materials, PZT with polymer or metal matrix have also been studied. Using PZT or PbTiO₃ powders...

... ceramic-polymer 0-3 connectivity composites have been manufactured and evaluated, though extremely low coupling coefficient (k_2) of these composites made them poor piezoelectric dampers. A PZT toroid embedded in solder....

Descriptors: *Ceramic materials; *Metal matrix composites; Coefficients ; Construction materials ; Coupling(Interaction); Damping ; Electrical properties; External; Matrix materials; Mechanical impedance; Metals; Modulus of elasticity ; Optimization; Passive systems; Piezoelectric effect; Piezoelectric materials; Resistors; Resonance; Sampling; Soldering; Vibration

Identifiers: *Passive vibration damping; *Piezoelectric damping; Polymer matrix; Electromechanical coupling coefficient ; Zirconium oxides; Polymer matrix composites; NTISDODXA

49/3,K/6 (Item 3 from file: 6)

DIALOG(R)File 6:NTIS

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1257734 NTIS Accession Number: AD-A169 826/5

New Materials for Spacecraft Stability and Damping - A Feasibility Study
(Final technical rept. 1 Oct 83-30 Sep 84)

Mackenzie, J. D.

California Univ., Los Angeles. Dept. of Materials Science and Engineering.

Corp. Source Codes: 005420219; 406237

Report No.: AFOSR-TR-86-0308

Nov 85 52p

Languages: English

Journal Announcement: GRAI8622

Order this product from NTIS by: phone at 1-800-553-NTIS (U.S. customers); (703)605-6000 (other countries); fax at (703)321-8547; and email at orders@ntis.fedworld.gov. NTIS is located at 5285 Port Royal Road, Springfield, VA, 22161, USA.

NTIS Prices: PC A04/MF A01

... hollow and oval glass fibers and hollow fiber-glass-polymer composites. The low temperature expansion coefficients, elastic moduli and damping constants were measured. Recommendations are made for further research and development...

Descriptors: *Glass fibers; *Glass; Coefficients ; Constants; Damping; Expansion; Low temperature; Modulus of elasticity ; Spacecraft; Stability; Structural members; Structures; Ceramic materials; Copper; Glass

reinforced plastics; Thermal expansion; Temperature coefficients ;
Spacecraft components

Identifiers: Aluminosilicate glass; Hollow fibers; Oval fibers; Damping
materials ; Engineering materials ; NTISDODXA

49/3,K/7 (Item 4 from file: 6)

DIALOG(R)File 6:NTIS

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1225023 NTIS Accession Number: N86-15676/7

Statisch en Dynamisch Materiaal-Model T.B.V. Elasto-Hydrodynamische Lager
Berekeningen (Static and Dynamic Material Model for Elastohydrodynamic
Bearing Calculations)

Seinstra, S.

Instituut TNO voor Werktuigkindige Constructies, Delft (Netherlands).

Corp. Source Codes: 076036000; IP871787

Sponsor: National Aeronautics and Space Administration, Washington, DC.

Report No.: IWECO-5076503; TDCK-79878

Dec 84 61p

Languages: Dutch

Journal Announcement: GRAI8608; STAR2406

Text in Dutch.

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customers); (703)605-6000 (other countries); fax at (703)321-8547; and
email at orders@ntis.fedworld.gov. NTIS is located at 5285 Port Royal Road,
Springfield, VA, 22161, USA.

NTIS Prices: PC A04/MF A01

... the dynamic behavior of rubber and synthetic bearing race materials
were investigated. Stiffness and damping coefficients of water lubricated
propeller shaft bearings with elastic race are insufficiently known. Based
on a literature review, nonlinear elasticity, high damping, and
incompressible behavior is assessed. Clear differences between static and
dynamic properties are noted. A dynamic model using a complex dynamic
modulus of elasticity is described.

Descriptors: *Bearings; *Elastohydrodynamics; *Epoxy resins; Mathematical
models; Rubber; Dynamic modulus of elasticity ; Propellers; Resin matrix
composites; Stiffness; Vibration damping

49/3,K/8 (Item 5 from file: 6)

DIALOG(R)File 6:NTIS

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0356672 NTIS Accession Number: AD-752 317/XAB

Damping in Porcelain Enamel Coatings

(Summary technical rept. Jun 69-Jun 71)

idharan, P. ; Plunkett, R.

Minnesota Univ Minneapolis Dept of Aeronautics and Engineering Mechanics

Corp. Source Codes: 233510

Report No.: AFML-TR-71-193

Jul 72 79p

Journal Announcement: GRAI7302

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customers); (703)605-6000 (other countries); fax at (703)321-8547; and
email at orders@ntis.fedworld.gov. NTIS is located at 5285 Port Royal Road,
Springfield, VA, 22161, USA.

NTIS Prices: PC A05/MF A01

... as protective and decorative coatings for metal parts. This report describes a study of the damping capability of these coatings at elevated temperatures. A maximum loss coefficient of .04 was observed for a bending specimen of mean thickness 0.09 inches, with...

Descriptors: *Ceramic coatings; *Protective treatments; Damping; Thermal properties; Vibration; Rheology; Modulus of elasticity ; Resonant frequency; Stresses; Thermal analysis; Numerical analysis

49/3,K/9 (Item 6 from file: 6)
DIALOG(R)File 6:NTIS
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0284563 NTIS Accession Number: AD-869 025/XAB
Measurement of Damping Coefficients and Dynamic Modulus of Fiber Composites

(Technical note)

Mazza, L. T. ; Paxson, E. B. ; Rodgers, R. L.
Army Aviation Materiel Labs., Fort Eustis, Va.

Corp. Source Codes: 036425

Report No.: USAAVLABS-TN-2

Feb 70 28p

Journal Announcement: GRAI7119

Distribution Limitation now Removed.

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NTIS Prices: PC A03/MF A01

Measurement of Damping Coefficients and Dynamic Modulus of Fiber Composites

The development of new materials, such as fiber-reinforced plastics (FRP), with attendant claims of high damping as compared to metals, has led to an increased interest in the damping coefficients and dynamic modulus of these materials. No theoretical methods are available to describe the mechanism of damping in FRP. The experimental techniques developed to measure the material damping of FRP were exponential decay of a vibrating beam (free-free mode) and forced vibration...

Descriptors: *Reinforced plastics; *Composite materials ; Damping ; Cantilever beams; Modulus of elasticity ; Fibers; Vibration; Boron alloys; Glass textiles; Shear stresses; Aluminum alloys

49/3,K/10 (Item 1 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)
(c) 2007 Elsevier Eng. Info. Inc. All rts. reserv.

07641497 E.I. No: EIP97033561163
Title: Analysis of reinforced plastic pipes subjected to dynamic loads
Author: Bratt, J.F.
Corporate Source: Norwegian Univ of Science and Technology, Trondheim, Norway
Conference Title: Proceedings of the 1996 3rd Joint Conference on Engineering Systems Design and Analysis, ESDA. Part 9 (of 9)
Conference Location: Montpellier, Fr Conference Date: 19960701-19960704
E.I. Conference No.: 46123
Source: American Society of Mechanical Engineers, Petroleum Division (Publication) PD v 81 n 9 1996. ASME, New York, NY, USA. p 187-191
Publication Year: 1996

CODEN: ASMPEX
Language: English

...Abstract: system needs careful analysis. Responses to dynamic loads depend upon material properties among which the modulus of elasticity and structural damping coefficient are important. The former increases by 25% when the pipe is heated 70 degrees C thus substantially altering the system eigenvalues. Reinforced plastic material, on the other hand, exhibits relatively high damping coefficient which may diminish the dynamic stress level, left bracket 1 right bracket . Dynamic deflections are...

Identifiers: Structural damping coefficient ; Dynamic stresses

49/3,K/11 (Item 2 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)
(c) 2007 Elsevier Eng. Info. Inc. All rts. reserv.

05866251 E.I. Monthly No: EI9003025274
Title: Rapidly solidified aluminum alloys for high temperature/ high stiffness applications.
Author: Gilman, Paul S.; Das, Santosh K.
Corporate Source: Allied-Signal Inc, Morristown, NJ, USA
Source: Metal Powder Report v 44 n 9 Sep 1989 p 616-620
Publication Year: 1989
CODEN: MPWRAQ ISSN: 0026-0657
Language: English

Title: Rapidly solidified aluminum alloys for high temperature/ high stiffness applications.

Identifiers: RAPID SOLIDIFICATION; COEFFICIENT OF THERMAL EXPANSION; MECHANICAL PROPERTIES; YOUNG 'S MODULUS OF ELASTICITY ; SPECIFIC STIFFNESS; FATIGUE CRACK GROWTH

49/3,K/12 (Item 3 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)
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05134166 E.I. Monthly No: EIM8611-081353
Title: DEVELOPMENT OF SPACE STATION STRUT DESIGN.
Author: Johnson, R. R.; Bluck, R. M.; Holmes, A. M. C.; Kural, M. H.
Corporate Source: Lockheed Missiles & Space Co, Sunnyvale, CA, USA
Conference Title: 31st International SAMPE Symposium and Exhibition 1986: Materials Sciences for the Future.
Conference Location: Los Angeles, CA, USA Conference Date: 19860407
E.I. Conference No.: 08126
Source: National SAMPE Symposium and Exhibition (Proceedings) 31st. Publ by SAMPE, Azusa, CA, USA p 90-102
Publication Year: 1986
CODEN: NSSD2 ISSN: 0147-9598 ISBN: 0-938994-30-1
Language: English

Abstract: Candidate Space Station struts exhibiting high stiffness (38-40 msi modulus of elasticity) were manufactured and experimentally evaluated. One and two inch diameter aluminum-clad evaluation specimens were...

...elements having 80 percent high-modulus graphite epoxy and 20 percent

aluminum. Performed tests included modulus of elasticity , thermal cycling, and coefficient of thermal expansion. The paper describes the design approach, including an analytical assessment of strut...

49/3,K/13 (Item 4 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)
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05029148 E.I. Monthly No: EI8610102807 E.I. Yearly No: EI86112294
Title: DEVELOPMENT OF SPACE STATION STRUT DESIGN.
Author: Johnson, R. R.; Bluck, R. M.; Holmes, A. M. C.; Kural, M. H.
Corporate Source: Lockheed Missiles & Space Co Inc, Synnyvale, CA, USA
Source: SAMPE Quarterly v 17 n 4 Jul 1986 p 1-9
Publication Year: 1986
CODEN: SAMQA2 ISSN: 0036-0821
Language: ENGLISH

Abstract: Candidate Space Station struts exhibiting high stiffness (38-40 msi modulus of elasticity) were manufactured and evaluated. One and two inch diameter aluminum-clad specimens were manufactured using...

...performed on elements having 80 percent high-modulus graphite-epoxy and 20 percent aluminum included modulus of elasticity , thermal cycling, and coefficient of thermal expansion. The paper describes the design approach, including an analytical assessment of thermal...

Identifiers: GRAPHITE EPOXY COMPOSITES; SPACE STATION STRUTS; 7075-T6 ALUMINUM ALLOY; MODULUS OF ELASTICITY ; COEFFICIENT OF THERMAL EXPANSION

49/3,K/14 (Item 1 from file: 34)
DIALOG(R)File 34:SciSearch(R) Cited Ref Sci
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03632958 Genuine Article#: PT552 No. References: 9
Title: PHYSICAL AND MECHANICAL-PROPERTIES AND THE STRUCTURE OF AS-QUENCHED TI-NI-AL ALLOYS
Author(s): MATLAKHOVA LA; FEDOTOV SG; PEKHTEREVA NN
Journal: RUSSIAN METALLURGY, 1994, N3, P91-95
ISSN: 0036-0295
Language: ENGLISH Document Type: ARTICLE (Abstract Available)

Abstract: The dependence of the modulus of normal elasticity E, shear modulus G, and logarithmic damping coefficient Q on the concentration and structure of as-quenched alloys of the system Ti - Ni ...

...concentration is given in weight %). The alloys with the martensite alpha' (alpha'')-phase structure display high damping properties. The beta-phase considerably deteriorates these properties. Addition of Al up to 3% expands...

49/3,K/15 (Item 1 from file: 35)
DIALOG(R)File 35:Dissertation Abs Online
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02046609 ORDER NO: AADAA-I3150808
Development and characterization of acoustically efficient cementitious

materials

Author: Neithalath, Narayanan
Degree: Ph.D.
Year: 2004
Corporate Source/Institution: Purdue University (0183)
Source: VOLUME 65/10-B OF DISSERTATION ABSTRACTS INTERNATIONAL.
PAGE 5287. 245 PAGES
ISBN: 0-496-11129-9

...model, a pore connectivity factor has been developed, that correlates well with the acoustic absorption coefficient. A falling head permeameter has been designed to ascertain the water permeability of EPC mixtures...

...morphologically altered cellulose fibers considered. The physical and mechanical properties (porosity, flexural and compressive strengths, modulus of elasticity), acoustic absorption, and the energy dissipating capacity (specific damping capacity) are evaluated. Composite mixing relations have been used to model the loss modulus and loss...

49/3,K/16 (Item 1 from file: 56)
DIALOG(R)File 56:Computer and Information Systems Abstracts
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0000283596 IP ACCESSION NO: 0272523
Analysis of reinforced plastic pipes subjected to dynamic loads

Bratt, J F
Norwegian Univ of Science and Technology, Trondheim, Norway

PAGES: 187-191
PUBLICATION DATE: 1996

PUBLISHER: ASME, NEW YORK, NY, (USA)

CONFERENCE:
The 1996 3rd Joint Conference on Engineering Systems Design and Analysis, ESDA. Part 9 (of 9), Montpellier, Fr, 01-04 July 1996

DOCUMENT TYPE: Conference Paper
RECORD TYPE: Abstract
LANGUAGE: English
FILE SEGMENT: Computer & Information Systems Abstracts

ABSTRACT:
... system needs careful analysis. Responses to dynamic loads depend upon material properties among which the modulus of elasticity and structural damping coefficient are important. The former increases by 25% when the pipe is heated 70 degrees C thus substantially altering the system eigenvalues. Reinforced plastic material, on the other hand, exhibits relatively high damping coefficient which may diminish the dynamic stress level, [1]. Dynamic deflections are large in GRP piping...

IDENTIFIERS: Structural damping coefficient ; Dynamic stresses

49/3,K/17 (Item 1 from file: 57)
DIALOG(R)File 57:Electronics & Communications Abstracts
(c) 2007 CSA. All rts. reserv.

0000531540 IP ACCESSION NO: 200609-22-078209
Evaluation of alternative materials for system-on-package (SOP) substrates

Shinotani, K-I; Raj, P M; Seo, M; Bansal, S; Sakurai, H; Bhattacharya, S K;
Tummala, R

IEEE Transactions on Components and Packaging Technologies, v 27, n 4, p
694-701, Dec. 2004
PUBLICATION DATE: 2004

PUBLISHER: Institute of Electrical and Electronics Engineers, Inc., 445
Hoes Ln, Piscataway, NJ, 08854-1331
COUNTRY OF PUBLICATION: USA
PUBLISHER URL: <http://ieee.org>
PUBLISHER EMAIL: inspec@ieee.org

DOCUMENT TYPE: Journal Article
RECORD TYPE: Abstract
LANGUAGE: English
ISSN: 1521-3331
FILE SEGMENT: Electronics & Communications Abstracts
ABSTRACT:

... the Packaging Research Center, Georgia Institute of Technology. The effect of board properties such as coefficient of thermal expansion (CTE) and high elastic modulus upon the increase in flip chip reliability...

...ceramics with lower CTE (AlN, 4 ppm/ deg C) were selected as inorganic boards with high stiffness. The thermomechanical reliability of the electrical interconnections was evaluated with flip-chips assembled on five ...

...underfill, it is necessary to have high elastic modulus along with Si-matched CTE. Ultra- high stiffness is an important requirement for developing new board materials that can realize SOP concept.

DESCRIPTORS: Dielectrics; Warpage; Stresses; Aluminum nitride; Carbon fiber reinforced plastics; Packaging; Chips; Thermal cycling; Modulus of elasticity; Stiffness; Polymer matrix composites; Silicon carbide; Silicon; Elastic modulus; Materials selection; Failure mechanisms; Test vehicles...

49/3,K/18 (Item 1 from file: 95)
DIALOG(R) File 95:TEME-Technology & Management
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01191889 W98040039419
Viscoelastic tensile and shear properties of the 62 wt-% Sn-36 wt-% Pb-2 wt-% Ag solder alloy
(Viskoelastische Zug- und Schereigenschaften einer 62gew%Sn-36gew%Pb-2gew%Ag Lotlegierung)
Veidt, M
Univ. of Queensland, Brisbane, AUS
Journal of Materials Science, v33, n6, pp1607-1610, 1998
Document type: journal article Language: English
Record type: Abstract
ISSN: 0022-2461

ABSTRACT:

...100 deg C are presented. The dynamic tensile and shear moduli and the viscous damping coefficients were measured using a phase-sensitive resonance technique. The results show that the temperature dependence...

...can be used to define a lower bound of the temperature dependence of the viscous damping coefficients of the material. For a temperature rise from 20 deg C to 65 deg C the dynamic Young's and shear moduli decrease by approximately 6 % and the damping coefficient increases by approximately 80 %.

...DESCRIPTORS: ATTENUATION; SOLDERING ALLOYS; TIN ALLOYS; TENSION TEST; EUTECTIC ALLOYS; COULOM MODULUS; ELASTIC MODULUS; OSCILLATION; DYNAMIC MODULUS OF ELASTICITY ; TEMPERATURE DEPENDENCE; DYNAMIC TESTING

49/3,K/19 (Item 2 from file: 95)
DIALOG(R)File 95:TEME-Technology & Management
(c) 2007 FIZ TECHNIK. All rts. reserv.

01107678 M97030450579

Analysis of reinforced plastic pipes subjected to dynamic loads
(Analyse von verstaerkten Kunststoffrohren unter dynamischen Belastungen)
Bratt, JF

Norwegian Univ. of Sci. and Technol., Trondheim, N
ESDA 1996, Engineering Systems Design and Analysis Conf., 3rd Biennial
Joint Conf., Vol. 9, Montpellier, F, Jul 1-4, 19961996
Document type: Conference paper Language: English
Record type: Abstract
ISBN: 0-7918-1504-8

ABSTRACT:

...system needs careful analysis. Responses to dynamic loads depend upon material properties among which the modulus of elasticity and structural damping coefficient are important. The former increases by 25 % when the pipe is heated 70 degrees C thus substantially altering the system eigenvalues. Reinforced plastic material, on the other hand, exhibits relatively high damping coefficient which may diminish the dynamic stress level. Dynamic deflections are large in GRP piping thus...

49/3,K/20 (Item 1 from file: 144)
DIALOG(R)File 144:Pascal
(c) 2007 INIST/CNRS. All rts. reserv.

14000177 PASCAL No.: 99-0185154
Fatigue damage accumulation in 3-dimensional SiC/SiC composites
KOSTOPOULOS V; PAPPAS Y Z; MARKOPOULOS Y P
Applied Mechanics Laboratory, University of Patras, Patras University
Campus, 265 00 Patras, Greece
Journal: Journal of the European Ceramic Society, 1999, 19 (2) 207-215
Language: English

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... fatigue loading on the material integrity was evaluated by measuring the degradation of the dynamic modulus of elasticity and the increase of the material damping. Conclusions, concerning design aspects using these materials, as well as fatigue life prediction were provided...

...English Descriptors: Ceramic fiber-SEC; Mechanical properties;
Mechanical degradation; Fatigue; Dynamic load; Acoustic emission; Elastic

modulus; Damping coefficient ; Internal friction; Interface properties;
Experimental study

...French Descriptors: SUB; Fibre ceramique-SEC; Propriete mecanique;
Degradation mecanique; Fatigue; Charge dynamique; Emission acoustique;
Module elasticite; Coefficient amortissement; Frottement interne;
Propriete interface; Etude experimentale; Composite SiC SiC

49/3,K/21 (Item 2 from file: 144)
DIALOG(R) File 144:Pascal
(c) 2007 INIST/CNRS. All rts. reserv.

13607853 PASCAL No.: 98-0312875
Frequency dependences of complex moduli and complex Poisson's ratio of
real solid materials
PRITZ T
Acoustics Laboratory, Szikkti Labs, Becsi ut 122-124, 1034 Budapest,
Hungary
Journal: Journal of sound and vibration, 1998, 214 (1) 83-104
Language: English

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The concept of a complex modulus of elasticity is a powerful and
widely used tool for characterizing the linear dynamic elastic and damping
properties of solid materials in the frequency domain. It is shown in
this paper that typical characters of frequency...

French Descriptors: Vibration mecanique; Amortissement vibration; Module
deformation; Nombre complexe; Reponse frequence; Fluage; Relaxation
contrainte; Coefficient Poisson; Modelisation; Causalite; Etude
experimentale; Caoutchouc; 4630M

49/3,K/22 (Item 3 from file: 144)
DIALOG(R) File 144:Pascal
(c) 2007 INIST/CNRS. All rts. reserv.

11641490 PASCAL No.: 94-0493608
Calculation of transient state response of machine members made of
composite materials and of sandwich panels
KUCHARSKI T
Tech. univ. Gdansk, dep. mechanical eng., 80-952 Gdansk, Poland
Journal: Computers & structures, 1994, 51 (5) 495-501
Language: English

... The dynamic analysis is more complicated when the variation with
respect to frequency of the modulus of elasticity and of damping
coefficient is taken into account. In this case the direct integration
method cannot be used to...

English Descriptors: Mechanical vibrations; Transients; Composite
materials ; Sandwich structures; Damping ; Vibration control; Passive
system; Numerical solution; Structural analysis

49/3,K/23 (Item 1 from file: 323)
DIALOG(R) File 323:RAPRA Rubber & Plastics
(c) 2007 RAPRA Technology Ltd. All rts. reserv.

00499692

TITLE: ADVANCED MATERIALS TO THE FORE

AUTHOR(S): Liu S K

CORPORATE SOURCE: Southwest Jiaotong University

SOURCE: MRS Bulletin; 18, No.11, Nov.1993, p.93-6

ISSN: 0883-7694

JOURNAL ANNOUNCEMENT: 199402 RAPRA UPDATE: 199402

DOCUMENT TYPE: Journal Article

LANGUAGE: English

SUBFILE: (R) RAPRA

...ABSTRACT: a variety of advanced materials and metal alloys as to their performance in terms of modulus of elasticity and damping capacity, and other mechanical properties such as tensile strength, hardness and density.

DESCRIPTORS: ALLOY; APPLICATION; COMPANY; COMPOSITE; COST; DAMPING

COEFFICIENT; DATA; DEFORMATION; DENSITY; EPOXIDE RESIN; EPOXY RESIN; FIBRE B; FIBRE-REINFORCED PLASTIC; FRP; GOLF CLUB...

49/3,K/24 (Item 2 from file: 323)

DIALOG(R) File 323:RAPRA Rubber & Plastics

(c) 2007 RAPRA Technology Ltd. All rts. reserv.

00320372

TITLE: DEVELOPMENT OF SPACE STATION STRUT DESIGN

AUTHOR(S): Johnson R R; Bluck R M; Holmes A M C; Kural M H

CORPORATE SOURCE: LOCKHEED MISSILES & SPACE CO.INC.

SOURCE: SAMPE Quarterly; 17, No.4, July 1986, p.1-9

ISSN: 0036-0821

CODEN: SAMQA2 JOURNAL ANNOUNCEMENT: 198701 RAPRA UPDATE: 198625

DOCUMENT TYPE: Journal Article

LANGUAGE: English

ABSTRACT: Candidate Space Station struts exhibiting high stiffness (38-40 msi modulus of elasticity) were manufactured and experimentally evaluated. One and two inch diameter aluminium-clad evaluation specimens were...

...using a dry fibre resin injection process. Preliminary tests of elastic modulus, thermal cycling and coefficient of thermal expansion were performed on strut elements having 80% high-modulus graphite/epoxy resin...

...DESCRIPTORS: PLASTIC; REINFORCED PLASTIC; RESIN INJECTION; SPACE APPLICATION; STIFFNESS; FLEXURAL PROPERTIES; TECHNICAL; THERMAL CYCLING; THERMAL EXPANSION COEFFICIENT; THERMAL PROPERTIES; THERMOSET; CARBON FIBER-REINFORCED PLASTIC; GRAPHITE FIBER-REINFORCED PLASTIC

49/3,K/25 (Item 1 from file: 335)

DIALOG(R) File 335:Ceramic Abstracts/World Ceramics Abstracts

(c) 2007 CSA. All rts. reserv.

0000399404

IP ACCESSION NO: 85-18559

Evaluation of alternative materials for system-on-package (SOP) substrates

Shinotani, K-I; Raj, P M; Seo, M; Bansal, S; Sakurai, H; Bhattacharya, S K; Tummala, R

IEEE Transactions on Components and Packaging Technologies, v 27, n 4, p
694-701, Dec. 2004
PUBLICATION DATE: 2004

PUBLISHER: Institute of Electrical and Electronics Engineers, Inc., 445
Hoes Ln, Piscataway, NJ, 08854-1331
COUNTRY OF PUBLICATION: USA
PUBLISHER URL: <http://ieee.org>
PUBLISHER EMAIL: inspec@ieee.org

DOCUMENT TYPE: Journal Article
RECORD TYPE: Abstract
LANGUAGE: English
ISSN: 1521-3331
FILE SEGMENT: Ceramics Abstracts/World Ceramic Abstracts
ABSTRACT:

... the Packaging Research Center, Georgia Institute of Technology. The effect of board properties such as coefficient of thermal expansion (CTE) and high elastic modulus upon the increase in flip chip reliability...

...ceramics with lower CTE (AlN, 4 ppm/ deg C) were selected as inorganic boards with high stiffness. The thermomechanical reliability of the electrical interconnections was evaluated with flip-chips assembled on five ...

...underfill, it is necessary to have high elastic modulus along with Si-matched CTE. Ultra- high stiffness is an important requirement for developing new board materials that can realize SOP concept.

DESCRIPTORS: Dielectrics; Warpage; Stresses; Aluminum nitride; Carbon fiber reinforced plastics; Packaging; Chips; Thermal cycling; Modulus of elasticity; Stiffness; Polymer matrix composites; Silicon carbide; Silicon; Elastic modulus; Materials selection; Failure mechanisms; Test vehicles...

49/3,K/26 (Item 2 from file: 335)
DIALOG(R)File 335:Ceramic Abstracts/World Ceramic Abstracts
(c) 2007 CSA. All rts. reserv.

0000304049 IP ACCESSION NO: 78-06924A
FATIGUE DAMAGE ACCUMULATION IN 3-DIMENSIONAL SiC/SiC COMPOSITES

Kostopoulos, V; Pappas, Y Z; Markopoulos, Y P
Patras,University

Journal of the European Ceramics Society, v 19, n 2, p 207-215, 1999
PUBLICATION DATE: 1999

PUBLISHER: Elsevier Science Ltd., Oxford Fulfillment Centre, P.O. Box 800,
Kidlington, Oxford, OX5 1DX
COUNTRY OF PUBLICATION: UK

DOCUMENT TYPE: Journal Article
RECORD TYPE: Abstract
LANGUAGE: English
ISSN: 0955-2219; 0955-2219
FILE SEGMENT: Ceramics Abstracts/World Ceramic Abstracts

ABSTRACT:
... fatigue loading on the material integrity were evaluated by measuring

the degradation of the dynamic modulus of elasticity and the increase of the material damping . The sensitivity of the proposed methodology is discussed. 14 refs.

...DESCRIPTORS: sic fibre-reinforced sic composite; Non-destructive testing ; Dynamic evaluation of fatigue; Mathematical analysis; Dynamic modulus of elasticity and damping coefficient ; Acoustic emission; Ceramic matrix composite; Cmc; Composite; Damage mechanics
?

51/3,K/1 (Item 1 from file: 35)
DIALOG(R)File 35:Dissertation Abs Online
(c) 2007 ProQuest Info&Learning. All rts. reserv.

02174021 ORDER NO: AADAA-I3228367

Flying height control sliders with piezoelectric and thermal nanoactuators
for ultrahigh density magnetic recording

Author: Juang, Jia-Yang

Degree: Ph.D.

Year: 2006

Corporate Source/Institution: University of California, Berkeley (0028)

Source: VOLUME 67/08-B OF DISSERTATION ABSTRACTS INTERNATIONAL.

PAGE 4664. 217 PAGES

ISBN: 978-0-542-82518-7

...1 Tbit/in², which is the goal on the next
generation of hard disk drives .

It is found that the intermolecular and electrostatic forces at the
head-disk interface that...

...in flying performance, such as track-seeking and dynamic load/unload,
due to its remarkably high stiffness and damping . We also propose an
inexpensive and low-temperature process for integrating the piezoelectric
material in...

...we conducted experimental analysis to investigate the flying and
actuation performances of the fabricated head- gimbal -assemblies. The FH
was successfully reduced from about 10 nm to contact, and a track...

...the mechanical challenges inherent in ultrahigh density magnetic
recording required for the next generation of hard disk drives as
well as some solutions to address these challenges.

?

File 348:EUROPEAN PATENTS 1978-2007/ 200749

(c) 2007 European Patent Office

File 349:PCT FULLTEXT 1979-2007/UB=20071122UT=20071115

(c) 2007 WIPO/Thomson

Set	Items	Description
S1	343	GIGAPASCAL??
S2	22	S1(3N)(10 OR TEN)
S3	544	DAMP?(3N)(CAPACIT? OR CAPABILIT?)
S4	495	GREATER(1W)0()02
S5	3768	HIGH()STIFFNESS
S6	2950	HIGH(3N)DAMP???
S7	11923	(MODULUS OR MODULI OR YOUNG)(3N)ELASTICITY
S8	206854	COEFFICIENT? OR RESTITUTION
S9	77310	(DISC OR DISK OR HARD)(3N)DRIVE?? OR HDD
S10	1529	(HEAD OR SLIDER OR TRANSDUCER OR PICKUP)(3N)SUSPENSION
S11	3263	GIMBAL
S12	3506	DAMPING(3N)MATERIAL??
S13	210131	POLYIMIDE? OR POLYAMIDE? OR POLYURETHANE?
S14	267210	EPOXY()RESIN OR POLYETHER()URETHANE? OR POLYETHERURETHANE - OR RUBBER OR SILICONE()RUBBER OR POLYVINYLCHLORIDE? OR POLYVI- NYL()CHLORIDE? OR POLYBUTADIENE?
S15	233622	PI OR PVC OR PU
S16	139606	STAINLESS()STEEL
S17	267894	ALUMINUM
S18	1	ZETA()0()02
S19	1	QUIET()STEEL OR STAR()SILENT()STEEL
S20	142	AU=(SASSINE, J? OR BHATTACHARYA, S? OR HUTCHINSON, A? OR L- IMMER, J? OR SASSINE J? OR BHATTACHARYA S? OR HUTCHINSON A? OR LIMMER J?)
S21	585	LOAD()BEAM
S22	2	S18 OR S19
S23	2	IDPAT (sorted in duplicate/non-duplicate order)
S24	2	IDPAT (primary/non-duplicate records only)
S25	0	S2(S)S4
S26	0	S2(S)S5
S27	0	S2(S)(S9 OR S10 OR S11)
S28	107	(S3 OR S6 OR S12)(S)(S9 OR S10 OR S11)
S29	15	S28(S)(S13 OR S14 OR S15)
S30	0	S29(S)S5
S31	6	S29 AND IC=G11B?
S32	6	S31 NOT S24
S33	0	S28(S)S1
S34	2	S1(S)(S3 OR S6 OR S12)
S35	2	S34 NOT (S24 OR S32)
S36	0	S20 AND S1
S37	0	S20 AND S4
S38	0	(S1 OR S2)(S)S4
S39	0	S2(S)S5
S40	0	S2(S)(S9 OR S10 OR S11)
S41	1	S2 AND IC=G11B?
S42	1	S41 NOT (S34 OR S24 OR S32)
S43	20	S1(S)(S16 OR S17)
S44	0	S43(S)S21
S45	1	S43(S)(S3 OR S6 OR S12)

24/3,K/1 (Item 1 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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01502107 **Image available**

METHOD AND APPARATUS FOR CORRELATING LEVELS OF BIOMARKER PRODUCTS WITH DISEASE

PROCEDE ET APPAREIL PERMETTANT DE METTRE DES NIVEAUX DE PRODUITS DE BIOMARQUEURS EN CORRELATION AVEC UNE MALADIE

Patent Applicant/Assignee:

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CA (Residence), CA (Nationality), (For all designated states except:
US)

Patent Applicant/Inventor:

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CHAO Samuel, 114 Glen Shield Avenue, Concord, Ontario, L4K 1T6, CA, CA
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ZHENG Run, 20 Observatory Lane Unit 135, Richmond Hill, Ontario, L4C 0M7,
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ZHANG Hongwei, 3 Atwood Place, Toronto, Ontario, M9V 1L1, CA, CA
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Legal Representative:

FRASER Janis K (agent), FISH & RICHARDSON P.C., P.O. Box 1022,
Minneapolis, MN 55440-1022, US

Patent and Priority Information (Country, Number, Date):

Patent: WO 200748074 A1 20070426 (WO 0748074)

Application: WO 2006US41600 20061023 (PCT/WO US2006041600)

Priority Application: US 2005729055 20051021; US 2006758418 20060112

Designated States:

(All protection types applied unless otherwise stated - for applications 2004+)

AE AG AL AM AT AU AZ BA BB BG BR BW BY BZ CA CH CN CO CR CU CZ DE DK DM
DZ EC EE EG ES FI GB GD GE GH GM GT HN HR HU ID IL IN IS JP KE KG KM KN
KP KR KZ LA LC LK LR LS LT LU LV LY MA MD MG MK MN MW MX MY MZ NA NG NI
NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SK SL SM SV SY TJ TM TN TR TT
TZ UA UG US UZ VC VN ZA ZM ZW

(EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LT LU LV MC NL
PL PT RO SE SI SK TR

(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

(AP) BW GH GM KE LS MW MZ NA SD SL SZ TZ UG ZM ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 214522

24/3,K/2 (Item 2 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00513522

RAIL TRANSIT SYSTEM

SYSTEME DE TRANSPORT FERROVIAIRE

Patent Applicant/Assignee:

OWEN William E,

Inventor(s):

OWEN William E,
Patent and Priority Information (Country, Number, Date):
Patent: WO 9944874 A1 19990910
Application: WO 99US4484 19990302 (PCT/WO US9904484)
Priority Application: US 9876593 19980303; US 99260144 19990301

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GD GE GH
GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN
MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU
ZW GH GM KE LS MW SD SL SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY
DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN GW ML
MR NE SN TD TG

Publication Language: English

Fulltext Word Count: 16049

Fulltext Availability:

Detailed Description

English Abstract

...beam and propelling the body along the beam. Improvements to the transit system include a quiet steel rail with vibration isolation for the beam, a vehicle braking system using a fixed plate...

Detailed Description

... a, I b, and I c are a side, top and end view of a quiet steel rail with vibration isolation according to an aspect of the present invention; Figs. 2a and...of operating that system, or other rail-based transit systems, will now be described.

1. Quiet Steel Rail With Vibration Isolation

In Fig. I a-c a steel wheel (IO), used as...

?

32/3,K/1 (Item 1 from file: 348)
DIALOG(R) File 348:EUROPEAN PATENTS
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01423625

Hard disk drive mounting bracket for noise and vibration control
Haltevorrichtung fur Festplatteneinheit zur Geraus- und
Vibrationsregelung
Support de montage d'unite a disque dur pour controler le bruit et les
vibrations

PATENT ASSIGNEE:

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all)

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(US)
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Uslander, Ira J., 1920 Chestnut Avenue, Glenview, IL 60025, (US)

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(DE)

PATENT (CC, No, Kind, Date): EP 1202280 A2 020502 (Basic)
EP 1202280 A3 030122

APPLICATION (CC, No, Date): EP 2001125576 011025;

PRIORITY (CC, No, Date): US 243457 P 001025; US 280095 P 010330

DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI;
LU; MC; NL; PT; SE; TR

EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI

INTERNATIONAL PATENT CLASS (V7): G11B-033/08

ABSTRACT WORD COUNT: 167

NOTE:

Figure number on first page: 2

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200218	768
SPEC A	(English)	200218	2170
Total word count - document A			2938
Total word count - document B			0
Total word count - documents A + B			2938

INTERNATIONAL PATENT CLASS (V7): G11B-033/08

...SPECIFICATION the viscoelastic core 33 typically being substantially
thinner.

Referring to FIG. 2, in use, the hard disk drive 10 is disposed
beneath the main panel 21 of the bracket 20 and is supported...

...mounting screws 35 extending through the apertures 26, the bracket 20
being isolated from the hard disk drive 10 by the use of isolating
grommets 36, respectively disposed on the inner and outer...

...and receiving the screws 35 therethrough. The grommets 36 may be
constructed of a soft rubber material, preferably having a high
damping characteristic. The bracket 20 is mounted in place in the

associated set top box or...

...pair of longitudinally spaced-apart, circular holes 47.

Referring to FIG. 6, in use, the hard disk drive 10 is disposed beneath the main panel 41 of the bracket 40 and is supported...

...47 and receiving the fasteners therethrough. The grommets 48 may be constructed of a soft rubber material, preferably having a high damping characteristic.

It is a significant aspect that the hard disk drive 10 is mounted in...

32/3,K/2 (Item 2 from file: 348)

DIALOG(R) File 348:EUROPEAN PATENTS

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00947516

Disc drive

Plattenantrieb

Entrainement de disque

PATENT ASSIGNEE:

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Kawasaki-shi, Kanagawa-ken 210, (JP), (applicant designated states:
AT;BE;CH;DE;DK;ES;FI;FR;GB;GR;IE;IT;LI;LU;MC;NL;PT;SE)

INVENTOR:

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Shibaura 1-chome Minato-ku Tokyo 105, (JP)
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Shibaura 1-chome Minato-ku Tokyo 105, (JP)

LEGAL REPRESENTATIVE:

Kramer, Reinhold, Dipl.-Ing. (7031), Blumbach, Kramer & Partner
Patentanwalte Radeckestrasse 43, 81245 Munchen, (DE)

PATENT (CC, No, Kind, Date): EP 860832 A2 980826 (Basic)
EP 860832 A3 990127

APPLICATION (CC, No, Date): EP 97122409 971218;

PRIORITY (CC, No, Date): JP 9735122 970219

DESIGNATED STATES: DE; FR; GB; NL

INTERNATIONAL PATENT CLASS (V7): G11B-033/08 ; G11B-017/028 ;
G11B-017/04 ;

ABSTRACT WORD COUNT: 177

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	9835	440
SPEC A	(English)	9835	2449
Total word count - document A			2889
Total word count - document B			0
Total word count - documents A + B			2889

INTERNATIONAL PATENT CLASS (V7): G11B-033/08 ...

... G11B-017/028 ...

... G11B-017/04

...SPECIFICATION vibration-damping construction capable of absorbing vibrations which have occurred inside the disc drive.

Silicon rubber , natural rubber , butyl rubber , and the like are hitherto used as the material of the vibration- damping member

(damper) constituting the vibration-damping construction of the disc drive . The vibration-damping member composed of such a material is required to have a sufficiently...

...thus having a low degree of vibration-absorbing efficiency.

Consequently, it is difficult for the disc drive to have a favorable vibration-damping performance.

It is accordingly an object of the present...

32/3,K/3 (Item 3 from file: 348)
DIALOG(R) File 348:EUROPEAN PATENTS
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00928971

Damping material and head suspension with use thereof
Dampfungsmaterial und Kopfaufhangung mit Verwendung davon
Materiau amortisseur et suspension de tete l'utilisant
PATENT ASSIGNEE:

NITTO DENKO CORPORATION, (301873), 1-2, Shimohozumi 1-chome Ibaraki-shi,
Osaka, (JP), (applicant designated states: DE;GB)

INVENTOR:

Nakamura, Masao, c/o Nitto Denko Corp., 1-2, Shimohozumi 1-chome,
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Tatsumi, Motoshige, c/o Nitto Denko Corp., 1-2, Shimohozumi 1-chome,
Ibaraki-shi, Osaka, (JP)

Toyota, Hidetsugu, c/o Nitto Denko Corp., 1-2, Shimohozumi 1-chome,
Ibaraki-shi, Osaka, (JP)

LEGAL REPRESENTATIVE:

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, Maximilianstrasse 58, 80538 Munchen, (DE)

PATENT (CC, No, Kind, Date): EP 847043 A1 980610 (Basic)

APPLICATION (CC, No, Date): EP 97121150 971202;

PRIORITY (CC, No, Date): JP 96322953 961203

DESIGNATED STATES: DE; GB

INTERNATIONAL PATENT CLASS (V7): G11B-005/48

ABSTRACT WORD COUNT: 95

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	9824	273
SPEC A	(English)	9824	2368
Total word count - document A			2641
Total word count - document B			0
Total word count - documents A + B			2641

INTERNATIONAL PATENT CLASS (V7): G11B-005/48

...SPECIFICATION manner.

(1) Rate of change in spring constant

Using a damping material in which a polyimide (PI) film, a stainless steel (SUS) foil, an aluminum (AL) foil or a polyethylene terephthalate (PET)...

...the measurement was carried out by arranging a suspension 22, applying a load to a gimbal part 21 of a pressure sensor through the output of voltage from a micro voltmeter...

32/3,K/4 (Item 1 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00859590 **Image available**

VIBRATION DAMPING MONOLITHIC POLYMERS
POLYMERES MONOLITHIQUES AMORTISSEURS DE VIBRATIONS

Patent Applicant/Assignee:

GENERAL ELECTRIC COMPANY, 1 River Road, Schenectady, NY 12345, US, US
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Inventor(s):

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Legal Representative:

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Turnpike W3C, Fairfield, CT 06431, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200193257 A1 20011206 (WO 0193257)

Application: WO 2001US13126 20010424 (PCT/WO US0113126)

Priority Application: US 2000208139 20000531; US 2000705295 20001103

Designated States:

(Protection type is "patent" unless otherwise stated - for applications
prior to 2004)

JP

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

Publication Language: English

Filing Language: English

Fulltext Word Count: 11835

Main International Patent Class (v7): G11B-007/24

Fulltext Availability:

Detailed Description

Detailed Description

... motor vehicle seat assembly.

Layers of elastomeric materials that absorb energy are other types of
damping material. Polyethylene, polypropylene, non conjugated dienes,
rubber cross linkers and similar materials are used in these vibration
systems. Composites of metal and polymer are employed on the outside of
many computer hard disk drives to reduce the noise of the drive
within the computer. Vibration dampers are also used in printed circuit
boards and spindle motors in internal disk drive applications. In
particular, vibration damping materials are used to guard the
interior of a disk drive from external shock forces.
Materials used for vibration damping should exhibit large viscous
losses in...

32/3,K/5 (Item 2 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00815199 **Image available**

DISK STORAGE SYSTEM AND MOUNTING SYSTEM FOR HEAD/DISK ASSEMBLY
SYSTEME DE STOCKAGE DE DISQUE ET SYSTEME DE MONTAGE POUR UN ASSEMBLAGE
TETE/DISQUE

Patent Applicant/Assignee:

INTERNATIONAL BUSINESS MACHINES CORPORATION, New Orchard Road, Armonk,
New York, NY 10504, US, US (Residence), US (Nationality)
IBM UNITED KINGDOM LIMITED, P.O. Box 41, North Harbour, Portsmouth,
Hampshire PO6 3AU, GB, GB (Residence), GB (Nationality), (Designated
only for: MC)

Inventor(s):

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DANG Hien, 5 Fairview Avenue, Nanuet, NY 10054, US,
SHARMA Arun, 51 Winding Brook Road, New Rochelle, NY 10804, US,
SATO Kiyoshi, 5-8-1-303, Kugenmakaigan, Fujisawa-shi, Kanagawa 251-0037
, JP,
NAKAMOTO Tatsuo, 4-7-24, Higashi-ohnuma, Sagamihara-shi, Kanagawa, JP,

Legal Representative:

MOSS Robert Douglas (agent), IBM United Kingdom Limited, Intellectual
Property Law, Hursley Park, Winchester, Hampshire SO21 2JN, GB,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200148758 A1 20010705 (WO 0148758)
Application: WO 2000GB4750 20001212 (PCT/WO GB0004750)
Priority Application: US 99472175 19991227

Designated States:

(Protection type is "patent" unless otherwise stated - for applications
prior to 2004)

AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE
ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT
LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM
TR TT TZ UA UG UZ VN YU ZA ZW
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR
(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW
(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 8822

Main International Patent Class (v7): G11B-033/08

Fulltext Availability:

Detailed Description

Detailed Description

... deficient in that each
solves only a subset of the three vibration challenges of an HDD , and
none of them provides a simple, low-cost solution to the seek-induced
transient dynamics. Thus, an HDD with a novel mounting frame that is
more robust against vibration can yield a competitive...

...servo algorithms, and inertial force generators,
undesirable vibration of a mechanical device, such as an HDD , can be
controlled. Previously, using shock isolating rubber mounts, storage
devices have been protected from linear shock input. However, due to
sway,
space requirements, and gradual improvements in shock enhanced storage
component design, explicit shock isolation of disk drives has no
longer
been pursued by manufacturers. Removal of traditional shock and vibration
isolation mounts...

...moved away from shock isolation design. In today's market, it is
believed that no disk drive is manufactured with a shock and

vibration isolation system. Previously, use of a shock isolation system protected an

HDD from shock handling, but it actually degraded the linear vibration problem as well as the settle-out problem. Further, traditional isolation systems use damping materials that are not good heat conductors.

DISCLOSURE OF THE INVENTION

is

Thus, in view of...

32/3,K/6 (Item 3 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00792572 **Image available**

HARD DISK DRIVE WITH HIGH BANDWIDTH
DISQUE DUR A LARGEUR DE BANDE ELEVEE

Patent Applicant/Inventor:

HEATH John Stewart, 34 Olivers Battery Road North, Winchester SO22 4JB,
GB, GB (Residence), GB (Nationality)

Patent and Priority Information (Country, Number, Date):

Patent: WO 200126098 A1 20010412 (WO 0126098)

Application: WO 2000GB3761 20001002 (PCT/WO GB0003761)

Priority Application: US 99412613 19991006; GB 200020677 20000823

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

DE JP US

Publication Language: English

Filing Language: English

Fulltext Word Count: 7724

Main International Patent Class (v7): G11B-005/48

Fulltext Availability:

Detailed Description

Detailed Description

... in FIGURE 5. The adhesive used to bond plate 30 for these tests (partially crosslinked epoxy resin) was selected to give the greatest reduction in amplitude over a wide range of temperature...

...may be recalled from the background section of this document that state of the art disk drives have soft adhesive used to bond coil 15 to yoke 16 specifically to achieve damping...

...state of - 10 the art may be understood by considering the strain applied to the damping material during a vibration cycle. The mode of the vibration (which is in the plane of...

...of coil 15 and consequent bending of yoke 16. In the state of the art disk drive such deflection induces strain in the adhesive 20 which is much less than the deflection...

?

35/3,K/1 (Item 1 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
(c) 2007 European Patent Office. All rts. reserv.

00593534

Method of particulate densification
Verfahren zum Verdichten von kornigen Massen
Methode pour densifier des masses particulaires

PATENT ASSIGNEE:

BOEING NORTH AMERICAN, INC., (2268342), 2201 Seal Beach Boulevard, Seal
Beach, California 90740-8250, (US), (Proprietor designated states: all)

INVENTOR:

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(US)

McDermott, William Edward, 28034 Lomo Drive, Rancho Palos Verdes,
California 90214, (US)

LEGAL REPRESENTATIVE:

Wachtershauser, Gunter, Prof. Dr. (12711), Patentanwalt, Tal 29, 80331
Munchen, (DE)

PATENT (CC, No, Kind, Date): EP 603491 A1 940629 (Basic)
EP 603491 B1 000412

APPLICATION (CC, No, Date): EP 93116995 931020;

PRIORITY (CC, No, Date): US 979024 921120

DESIGNATED STATES: BE; CH; DE; DK; ES; FR; GB; IT; LI; NL; SE

INTERNATIONAL PATENT CLASS (V7): B22F-003/10

ABSTRACT WORD COUNT: 50

NOTE:

Figure number on first page: 1

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	200015	176
CLAIMS B	(German)	200015	180
CLAIMS B	(French)	200015	214
SPEC B	(English)	200015	856
Total word count - document A			0
Total word count - document B			1426
Total word count - documents A + B			1426

...SPECIFICATION a laser. The use of a overlay makes it possible to achieve pressures in the gigapascal (GPa) range (1 GPa = 145,000 psi) with duration times of several nanoseconds. Various overlay...

...backing material 15 may be utilized, which material is a suitable acoustic or stress wave damping material .

The pressure wave acts on the powder to drive the individual particles into intimate contact...

35/3,K/2 (Item 1 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00735431

DATA STORAGE MEDIA
SUPPORT DE STOCKAGE DE DONNEES

Patent Applicant/Assignee:

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LANDA Bernard Paul, F3 Pondview Drive, Pittsfield, MA 01201, US,
LIKIBI Parfait Jean Marie, 3322 Westhampton Drive, Newburgh, IN 47630, US

FEIST Thomas Paul, 11 Wintergreen Circle, Clifton Park, NY 12065, US,
DAI Kevin Hsingtao, 3 Carlton Oaks, Clifton Park, NY 12065, US,
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BUSHKO Wit Cezary, 118 Haswell Road, Watervliet, NY 12189, US,
KUBOTERA Kazunao, 31 Sheffield Drive, Delmar, NY 12054, US,
GORCZYCA Thomas B, 3059 New Williamsburg Drive, Schenectady, NY 12303, US

WOODS Joseph, Apartment A14C, 2150 Rosa Road, Schenectady, NY 12309, US,

Legal Representative:

SNYDER Bernard (agent), General Electric Company, 3135 Easton Turnpike
W3C, Fairfield, CT 06431, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200048172 A2 20000817 (WO 0048172)

Application: WO 2000US3644 20000211 (PCT/WO US0003644)

Priority Application: US 99120101 19990212; US 99134585 19990517; US
99137883 19990607; US 99137884 19990607; US 99146248 19990729

Designated States:

(Protection type is "patent" unless otherwise stated - for applications
prior to 2004)

AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GD GE GH
GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN
MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN YU ZA
ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 18524

Fulltext Availability:

Detailed Description

Detailed Description

... a very high stiffness (e.g., aluminum with a Young's modulus of about
70 gigapascals (GPa), and ceramic with a Young's modulus of about 200
GPa), a level above that which has been achieved with plastic substrates.
It was unexpectedly found that the damping coefficient of a material
is important to offset the decreased stiffness of plastic substrates as
compared to aluminum. Consequently...

...spring/dashpot assembly between a vibration source and an object to be
vibrated. For effective damping, the material should absorb and/or
dissipate the energy of vibration transmitted through the material as
energy...

?

42/3,K/1 (Item 1 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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01459309 **Image available**

METHOD AND PROCESS FOR FABRICATING READ SENSORS FOR READ-WRITE HEADS IN
MASS STORAGE DEVICES

METHODE ET PROCEDE DESTINES A LA FABRICATION DE CAPTEURS DE LECTURE POUR
TETES DE LECTURE-ECRITURE DE MEMOIRES DE GRANDE CAPACITE

Patent Applicant/Assignee:

VEECO INSTRUMENTS INC, 100 SUNNYSIDE BOULEVARD, Suite B, Woodbury, NY
11797, US, US (Residence), US (Nationality), (For all designated states
except: US)

Patent Applicant/Inventor:

HEGDE Hariharakeshave S, 262-04, 58th Street, Little Neck, NY 11362, US,
US (Residence), IN (Nationality),
MING Mao, 5136 Corona Court, Pleasanton, CA 94588, US, US (Residence), US
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DRUZ Boris, 2522 West 1st Street, Brooklyn, NY 11223, US, US (Residence),
US (Nationality),
DEVASAHAYAM Adrian J, 14 Retta Lane, Commack, NY 11725, US, US
(Residence), IN (Nationality),

Legal Representative:

HUMPHREY Thomas W et al (agent), Wood, Herron & Evans, L.L.P., 2700 Carew
Tower, Cincinnati, OH 45202, US

Patent and Priority Information (Country, Number, Date):

Patent: WO 200702011 A1 20070104 (WO 0702011)
Application: WO 2006US23870 20060620 (PCT/WO US2006023870)
Priority Application: US 2005166322 20050624

Designated States:

(All protection types applied unless otherwise stated - for applications
2004+)

AE AG AL AM AT AU AZ BA BB BG BR BW BY BZ CA CH CN CO CR CU CZ DE DK DM
DZ EC EE EG ES FI GB GD GE GH GM HN HR HU ID IL IN IS JP KE KG KM KN KP
KR KZ LA LC LK LR LS LT LU LV LY MA MD MG MK MN MW MX MZ NA NG NI NO NZ
OM PG PH PL PT RO RS RU SC SD SE SG SK SL SM SY TJ TM TN TR TT TZ UA UG
US UZ VC VN ZA ZM ZW
(EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LT LU LV MC NL
PL PT RO SE SI SK TR
(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG
(AP) BW GH GM KE LS MW MZ NA SD SL SZ TZ UG ZM ZW
(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 6976

International Patent Class (v8 + Attributes)

IPC + Level Value Position Status Version Action Source Office:

G11B-0005/39 ...

Fulltext Availability:

Detailed Description
Claims

Detailed Description

... the hardness of the constituent material of polish stop layer 40 is
greater than about 10 gigapascals (GPa). Depending upon the specific
forming process, the hardness of DLC for use as the...

Claim

... wherein the polish stop layer is composed of a material having a
hardness greater than 10 gigapascals .

45/3,K/1 (Item 1 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00735431

DATA STORAGE MEDIA

SUPPORT DE STOCKAGE DE DONNEES

Patent Applicant/Assignee:

GENERAL ELECTRIC COMPANY, 1 River Road, Schenectady, NY 12345, US, US
(Residence), US (Nationality)

Inventor(s):

DAVIS John Edward, 58 Salvatore Drive, Westfield, MA 01085, US,
FURLANO Daniel, 274 Williams Street, Pittsfield, MA 01201, US,
LANDA Bernard Paul, F3 Pondview Drive, Pittsfield, MA 01201, US,
LIKIBI Parfait Jean Marie, 3322 Westhampton Drive, Newburgh, IN 47630, US

FEIST Thomas Paul, 11 Wintergreen Circle, Clifton Park, NY 12065, US,
DAI Kevin Hsingtao, 3 Carlton Oaks, Clifton Park, NY 12065, US,
SUBRAMANIAN Suresh, 89 Dane Court, Latham, NY 12110, US,
HARIHARAN Ramesh, 82C Yorkshire Drive, Guilderland, NY 12084, US,
BUSHKO Wit Cezary, 118 Haswell Road, Watervliet, NY 12189, US,
KUBOTERA Kazunao, 31 Sheffield Drive, Delmar, NY 12054, US,
GORCZYCA Thomas B, 3059 New Williamsburg Drive, Schenectady, NY 12303, US

WOODS Joseph, Apartment A14C, 2150 Rosa Road, Schenectady, NY 12309, US,

Legal Representative:

SNYDER Bernard (agent), General Electric Company, 3135 Easton Turnpike
W3C, Fairfield, CT 06431, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200048172 A2 20000817 (WO 0048172)

Application: WO 2000US3644 20000211 (PCT/WO US0003644)

Priority Application: US 99120101 19990212; US 99134585 19990517; US
99137883 19990607; US 99137884 19990607; US 99146248 19990729

Designated States:

(Protection type is "patent" unless otherwise stated - for applications
prior to 2004)

AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GD GE GH
GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN
MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN YU ZA
ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 18524

Fulltext Availability:

Detailed Description

Detailed Description

... 202 disposed over a portion or all of the core.

10

Conventional substrates, e.g., aluminum and ceramic substrates without
a plastic overlay, have a very high stiffness (e.g., aluminum with a
Young's modulus of about 70 gigapascals (GPa), and ceramic with a
Young's modulus of about 200 GPa), a level above that which has been
achieved with plastic substrates. It was unexpectedly found that the
damping coefficient of a material is important to offset the decreased

stiffness of plastic substrates as compared to aluminum . Consequently, in order to minimize effects of vibration of the disk, the visco-elastic material...

...spring/dashpot assembly between a vibration source and an object to be vibrated. For effective damping , the material should absorb and/or dissipate the energy of vibration transmitted through the material as energy...

?

File 9:Business & Industry(R) Jul/1994-2007/Nov 30
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 File 15:ABI/Inform(R) 1971-2007/Dec 08
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 File 16:Gale Group PROMT(R) 1990-2007/Dec 05
 (c) 2007 The Gale Group
 File 20:Dialog Global Reporter 1997-2007/Dec 10
 (c) 2007 Dialog
 File 47:Gale Group Magazine DB(TM) 1959-2007/Nov 21
 (c) 2007 The Gale group
 File 75:TGG Management Contents(R) 86-2007/Nov W3
 (c) 2007 The Gale Group
 File 80:TGG Aerospace/Def.Mkts(R) 1982-2007/Nov 29
 (c) 2007 The Gale Group
 File 88:Gale Group Business A.R.T.S. 1976-2007/Nov 28
 (c) 2007 The Gale Group
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 (c) 2007 The HW Wilson Co.
 File 112:UBM Industry News 1998-2004/Jan 27
 (c) 2004 United Business Media
 File 141:Readers Guide 1983-2007/Oct
 (c) 2007 The HW Wilson Co
 File 148:Gale Group Trade & Industry DB 1976-2007/Nov 29
 (c)2007 The Gale Group
 File 160:Gale Group PROMT(R) 1972-1989
 (c) 1999 The Gale Group
 File 275:Gale Group Computer DB(TM) 1983-2007/Dec 06
 (c) 2007 The Gale Group
 File 264:DIALOG Defense Newsletters 1989-2007/Sep 21
 (c) 2007 Dialog
 File 369:New Scientist 1994-2007/Sep W4
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 (c) 2007 The HW Wilson Co
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 File 620:EIU:Viewswire 2007/Dec 07
 (c) 2007 Economist Intelligence Unit
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 (c) 2007 CMP Media, LLC
 File 696:DIALOG Telecom. Newsletters 1995-2007/Dec 06

(c) 2007 Dialog
 File 674:Computer News Fulltext 1989-2006/Sep W1
 (c) 2006 IDG Communications
 File 810:Business Wire 1986-1999/Feb 28
 (c) 1999 Business Wire
 File 813:PR Newswire 1987-1999/Apr 30
 (c) 1999 PR Newswire Association Inc
 File 587:Jane`s Defense&Aerospace 2007/Nov W4
 (c) 2007 Jane`s Information Group

Set	Items	Description
S1	987	GIGAPASCAL??
S2	88	S1(3N)(10 OR TEN)
S3	1507	DAMP?(3N)(CAPACIT? OR CAPABILIT?)
S4	302	GREATER(1W)0()02
S5	2756	HIGH()STIFFNESS
S6	3930	HIGH(3N)DAMP???
S7	3161	(MODULUS OR MODULI OR YOUNG)(3N)ELASTICITY
S8	290616	COEFFICIENT? OR RESTITUTION
S9	758398	(DISC OR DISK OR HARD)(3N)DRIVE?? OR HDD
S10	1435	(HEAD OR SLIDER OR TRANSDUCER OR PICKUP)(3N)SUSPENSION
S11	4186	GIMBAL
S12	1540	DAMPING(3N)MATERIAL??
S13	132162	POLYIMIDE? OR POLYAMIDE? OR POLYURETHANE?
S14	1749925	EPOXY()RESIN OR POLYETHER()URETHANE? OR POLYETHERURETHANE - OR RUBBER OR SILICONE()RUBBER OR POLYVINYLCHLORIDE? OR POLYVI- NYL()CHLORIDE? OR POLYBUTADIENE?
S15	308993	PI OR PVC OR PU
S16	274579	STAINLESS()STEEL
S17	716739	ALUMINUM
S18	1	ZETA()0()02
S19	540	QUIET()STEEL OR STAR()SILENT()STEEL
S20	1063	AU=(SASSINE, J? OR BHATTACHARYA, S? OR HUTCHINSON, A? OR L- IMMER, J? OR SASSINE J? OR BHATTACHARYA S? OR HUTCHINSON A? OR LIMMER J?)
S21	63	LOAD()BEAM
S22	0	S18 NOT MISOCYCLONE
S23	0	S2(S)S4
S24	0	S2(S)(S3 OR S6 OR S12)
S25	0	S2(S)(S13 OR S14 OR S15)
S26	6	S2(S)(S16 OR S17)
S27	2	RD S26 (unique items)
S28	0	S20 AND S2
S29	0	S20(S)(S3 OR S6 OR S12)
S30	0	(S3 OR S6 OR S12)(S)S4
S31	0	S2(S)S21
S32	1	S2(S)S5
S33	0	S2(S)S6
S34	0	S7(S)S8(S)S1
S35	75	S1(S)(S13 OR S14 OR S15 OR S16 OR S17)
S36	0	S35(S)S9:S11
S37	0	S35(S)S19
S38	0	S35(S)(S3 OR S6 OR S12)
S39	0	S35(S)S7
S40	0	S35(S)S8
S41	0	S35(S)S21
S42	0	S35(S)S5
S43	0	S35(S)SEAGATE
S44	91223	SEAGATE
S45	0	S44(S)S2
S46	0	S44(S)S1

27/3,K/1 (Item 1 from file: 47)
DIALOG(R)File 47:Gale Group Magazine DB(TM)
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05164333 SUPPLIER NUMBER: 19469388 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Silicon and oxygen self-diffusivities in silicate liquids measured to 15
gigapascals and 2800 kelvin.
Poe, Brent T.; McMillan, Paul F.; Rubie, David C.; Chakraborty, Sumit;
Yarger, Jeff; Diefenbacher, Jason
Science, v276, n5316, p1245(4)
May 23, 1997
ISSN: 0036-8075 LANGUAGE: English RECORD TYPE: Fulltext; Abstract
WORD COUNT: 2866 LINE COUNT: 00234

...AUTHOR ABSTRACT: atoms. For highly polymerized aluminosilicate liquids, oxygen diffusivities pass through a maximum at pressures below 10 gigapascals, whereas up to 15 gigapascals diffusivities continue to increase for sodium tetrasilicate liquid. A diffusivity maximum indicates a change in the mechanism of formation of 5-coordinated silicon or aluminum in the liquid. In the case of aluminosilicate liquids, this mechanism is restricted to aluminum sites in the network, suggesting that not only degree of polymerization, but also the ratio of aluminum to aluminum plus silicon strongly influences the behavior of magmatic processes at depth.

27/3,K/2 (Item 1 from file: 370)
DIALOG(R)File 370:Science
(c) 1999 AAAS. All rts. reserv.

00509762
Alumina in the Lower Mantle
Science Vol. 284 No. 5415 pp. 7091
Publication Date: 04/30/1999 (990430) Publication Year: 1999
Document Type: Journal ISSN: 0036-8075
Language: English
Section Heading: This Week in Science
Word Count: 116

...Summary: FeSiO₃ perovskite, the most abundant mineral in the lower mantle, because the amount of aluminum in the perovskite can constrain the amount of iron. Unfortunately, the equation of state of...

...of state of a MgSiO₃ perovskite with 5 mole % Al₂O₃ to a pressure of 10 gigapascals. They found that the alumina-enriched perovskite is more compressible than the MgSiO₃ perovskite, an...
?

32/3,K/1 (Item 1 from file: 369)
DIALOG(R)File 369:New Scientist
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00124350 16422162.700 (USE FORMAT 7 OR 9 FOR FULLTEXT)

Crystal fix

SAMPLE, IAN

New Scientist, vol. 164, no. 2216, p. 17

December 11, 1999

LANGUAGE: English RECORD TYPE: Fulltext DOC. TYPE: Journal

WORD COUNT: 520

(USE FORMAT 7 OR 9 FOR FULLTEXT)

TEXT:

...heal.

Human bone has a Young's modulus--a measure of its stiffness--of between 10 and 30 gigapascals , while the usual supporting steel rods offer very high stiffness of 220 gigapascals. But this can sometimes be too stiff--causing damage to the bone..

File 344:Chinese Patents Abs Jan 1985-2006/Jan
(c) 2006 European Patent Office
File 347:JAPIO Dec 1976-2007/Jun(Updated 070926)
(c) 2007 JPO & JAPIO
File 350:Derwent WPIX 1963-2007/UD=200779
(c) 2007 The Thomson Corporation

Set	Items	Description
S1	100	GIGAPASCAL??
S2	6	S1(3N)(10 OR TEN)
S3	1385	DAMP?(3N)(CAPACIT? OR CAPABILIT?)
S4	275	GREATER(1W)0()02
S5	2807	HIGH()STIFFNESS
S6	7466	HIGH(3N)DAMP???
S7	14724	(MODULUS OR MODULI OR YOUNG)(3N)ELASTICITY
S8	246580	COEFFICIENT? OR RESTITUTION
S9	107457	(DISC OR DISK OR HARD)(3N)DRIVE?? OR HDD
S10	3886	(HEAD OR SLIDER OR TRANSDUCER OR PICKUP)(3N)SUSPENSION
S11	6303	GIMBAL
S12	9215	DAMPING(3N)MATERIAL??
S13	351555	POLYIMIDE? OR POLYAMIDE? OR POLYURETHANE?
S14	614598	EPOXY()RESIN OR POLYETHER()URETHANE? OR POLYETHERURETHANE - OR RUBBER OR SILICONE()RUBBER OR POLYVINYLCHLORIDE? OR POLYVI- NYL()CHLORIDE? OR POLYBUTADIENE?
S15	117491	PI OR PVC OR PU
S16	111481	STAINLESS()STEEL
S17	325082	ALUMINUM
S18	0	ZETA()0()02
S19	3	QUIET()STEEL OR STAR()SILENT()STEEL
S20	284	AU=(SASSINE, J? OR BHATTACHARYA, S? OR HUTCHINSON, A? OR L- IMMER, J? OR SASSINE J? OR BHATTACHARYA S? OR HUTCHINSON A? OR LIMMER J?)
S21	1967	LOAD()BEAM
S22	0	S19 AND IC=G11B?
S23	0	S20 AND S1
S24	0	S20 AND S4
S25	3	S20 AND (S3 OR S6 OR S12)
S26	6	S2 NOT S25
S27	1	S1 AND (S3 OR S6 OR S12)
S28	1	S27 NOT (S2 OR S25)
S29	3942	(S3 OR S6 OR S12) AND (S13 OR S14 OR S15)
S30	46	S29 AND (S9 OR S10 OR S11)
S31	17	S30 AND (S4 OR S5 OR S6 OR S7 OR S8)
S32	17	S31 NOT (S27 OR S2 OR S25)
S33	5	S32 AND IC=G11B?
S34	5	S33 NOT AD=20040227:20071210/PR
S35	12	S32 NOT S34
S36	8	S35 NOT AD=20040227:20071210/PR
S37	1	(S3 OR S6 OR S12) AND S4
S38	1	S37 NOT (S31 OR S27 OR S2 OR S25)
S39	267	(S9 OR S10 OR S11) AND (S3 OR S6 OR S12)
S40	5	S39 AND S5
S41	4	S40 NOT (S37 OR S31 OR S27 OR S2 OR S25)
S42	2	S41 NOT AD=20040227:20071210/PR
S43	0	S39 AND S1

25/3,K/1 (Item 1 from file: 350)
DIALOG(R) File 350:Derwent WPIX
(c) 2007 The Thomson Corporation. All rts. reserv.

0015278493 - Drawing available

WPI ACC NO: 2005-628616/200564

XRFX Acc No: N2005-516139

Disc drive e.g. hard drive, head suspension assembly for computer system,
has hinge and gimbal components, where one of components is made from
damping material with high stiffness and damping capacity

Patent Assignee: SEAGATE TECHNOLOGY LLC (SEAG-N)

Inventor: BHATTACHARYA S ; HUTCHINSON A J ; LIMMER J D ; SASSINE J H

Patent Family (1 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update
US 20050190502	A1	20050901	US 2004788863	A	20040227	200564 B

Priority Applications (no., kind, date): US 2004788863 A 20040227

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing	Notes
US 20050190502	A1	EN	11	4		

...for computer system, has hinge and gimbal components, where one of
components is made from damping material with high stiffness and
damping capacity

Original Titles:

Head suspension assembly having a high damping high stiffness
component

Inventor: BHATTACHARYA S ...

... HUTCHINSON A J ...

... LIMMER J D ...

... SASSINE J H

Alerting Abstract ...head. One of the hinge component and the gimbal
component is made from a structural damping material having high
stiffness and high damping capacity....ADVANTAGE - One of the hinge and
gimbal components is made from structural damping material having high
stiffness and high damping capacity, thus reducing vibration resonance
without sacrificing overall stiffness of the assembly...

Original Publication Data by Authority

Inventor name & address:

Sassine, Joseph H ...

... Bhattacharya, Sandeepan ...

... Hutchinson, Andrew J ...

... Limmer, Joel D

Original Abstracts:

...least one of the hinge component and the gimbal component is made from a
structural damping material having high stiffness and high
damping capacity.

Claims:

...one of the hinge component and the gimbal component is made from a first structural damping material having high stiffness and high damping capacity.

25/3,K/2 (Item 2 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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0015182431 - Drawing available

WPI ACC NO: 2005-532023/200554

XRFX Acc No: N2005-435610

Head suspension for use in data storage device, has laser beam region that is adjacent to bend region, has damping material support structure which extends from strut into aperture of bend region

Patent Assignee: BHATTACHARYA S. (BHAT-I); HAMMEL B D (HAMM-I); MCREYNOLDS D P (MCRE-I); NARAYAN S H (NARA-I); RENKEN F P (RENK-I)

Inventor: BHATTACHARYA S ; HAMMEL B D; MCREYNOLDS D P; NARAYAN S H; RENKEN F P

Patent Family (1 patents, 1 countries)

Patent Application

Number	Kind	Date	Number	Kind	Date	Update
US 20050157427	A1	20050721	US 2004758390	A	20040115	200554 B

Priority Applications (no., kind, date): US 2004758390 A 20040115

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing	Notes
--------	------	-----	----	-----	--------	-------

US 20050157427	A1	EN	7	4		
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...in data storage device, has laser beam region that is adjacent to bend region, has damping material support structure which extends from strut into aperture of bend region

Inventor: BHATTACHARYA S ...

Alerting Abstract ...strut (144) and aperture bounded by strut and mounting region. The laser beam region having damping material support structure, is adjacent to the bend region. The damping material support structure extends from the strut into the aperture....potential exposure of the read/write head and the disk to adhesive medium of the damping material, is reduced by extending the damping material support structure into the aperture...

...138 large damping material

Original Publication Data by Authority

Inventor name & address:

... Bhattacharya, Sandeepan

Original Abstracts:

...from the bend region to form an aperture, a strut, an isolation aperture and a damping material support structure; and affixing a damping material to the strut and the damping material support structure. The apparatus includes the bend region adjacent both the mounting region and the load beam region, with the damping material attached to the strut as well as to the damping material support structure. The load beam region includes a rigid portion, which supports a flexure upon...

Claims:

...by the bend member and the mounting region; anda load beam region with a damping material support structure adjacent the bend member, the damping material support structure offset from the bend member and extending into the aperture.

25/3,K/3 (Item 3 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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0014751241 - Drawing available
WPI ACC NO: 2005-098872/200511
XRPX Acc No: N2005-085749

Slider supporting suspension for disc drive, has flexible beam section with extended, peak strain region, and damper covering portion of peak strain region and placed over areas of high strain energies

Patent Assignee: SEAGATE TECHNOLOGY LLC (SEAG-N)

Inventor: HUTCHINSON A J

Patent Family (2 patents, 1 countries)

Patent			Application				
Number	Kind	Date	Number	Kind	Date	Update	
US 20040264054	A1	20041230	US 2003607756	A	20030627	200511	B
US 7064931	B2	20060620	US 2003607756	A	20030627	200641	E

Priority Applications (no., kind, date): US 2003607756 A 20030627

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
US 20040264054	A1	EN	8	5	

Inventor: HUTCHINSON A J

...164) covers a portion of the peak strain region and is placed over areas of high strain energies. The damper includes a damping material made of a viscoelastic polymer that is a pressure sensitive adhesive.

Original Publication Data by Authority

Inventor name & address:
Hutchinson, Andrew John ...

... Hutchinson, Andrew John
?

26/3,K/1 (Item 1 from file: 347)
DIALOG(R)File 347:JAPIO
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01610833
MOLDED ITEM OF ULTRA-HIGH-MOLECULAR WEIGHT POLYPROPYLENE

PUB. NO.: 60-089333 [JP 60089333 A]
PUBLISHED: May 20, 1985 (19850520)
INVENTOR(s): KANEMOTO TETSUO
TSURUTA MEIJI
TANAKA KOJI
TAKEDA MASATAMI
APPLICANT(s): TOUNEN SEKIYU KAGAKU KK [359451] (A Japanese Company or
Corporation), JP (Japan)
APPL. NO.: 58-196130 [JP 83196130]
FILED: October 21, 1983 (19831021)
JOURNAL: Section: M, Section No. 415, Vol. 09, No. 235, Pg. 4,
September 21, 1985 (19850921)

ABSTRACT

...ultra-high-molecular weight polypropylene molded item having a tensional modulus of not less than 10 gigapascals and a breaking strength of 0.6 gigapascals and more can be obtained. Therefore it...

26/3,K/2 (Item 1 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2007 The Thomson Corporation. All rts. reserv.

0016916555 - Drawing available
WPI ACC NO: 2007-631621/200760
XRAM Acc No: C2007-224155
XRPX Acc No: N2007-493163

Heater for thermogenesis for non-catalytic combination or sintering of e.g. diamond, cubic-crystal boron nitride, includes graphite main body to which ultra high pressure can be applied, and contains predetermined amount of boron

Patent Assignee: SUMITOMO ELECTRIC IND LTD (SUME)

Inventor: SUMIYA H

Patent Family (1 patents, 1 countries)

Patent		Application				
Number	Kind	Date	Number	Kind	Date	Update
JP 2007207550	A	20070816	JP 200624318	A	20060201	200760 B

Priority Applications (no., kind, date): JP 200624318 A 20060201

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing	Notes
JP 2007207550	A	JA	7	1		

Alerting Abstract ...resistivity that is less than or equal to 0.1 Ohmscm at a pressure of 10 gigapascals or more and at a temperature of 1800 (deg) C of more....generate a high heating temperature of 1800 (deg) C or more at a pressure of 10 gigapascals or more, without the need of temperature monitoring by maintaining electric power settings made during ...

26/3,K/3 (Item 2 from file: 350)

DIALOG(R)File 350:Derwent WPIX
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0015667093

WPI ACC NO: 2006-231277/200624

XRAM Acc No: C2006-075904

XRPX Acc No: N2006-198482

Thin film, useful as low constant dielectric films in integrated circuits, comprises a composition obtained by polymerizing a silicon containing monomer to form a siloxane material

Patent Assignee: HACKER N (HACK-I); HADZIC A (HADZ-I); KYLMA J (KYLMA-I); PAULASAARI J (PAUL-I); PIETIKAINEN J (PIET-I); RANTALA J T (RANT-I); SILECS OY (SILE-N); TORMANEN T T (TORM-I)

Inventor: HACKER N; HADZIC A; KYLMA J; KYLMAE J; PAULASAARI J; PIETIKAEINEN J; PIETIKAINEN J; RANTALA J T; TOERMAENEN T T; TORMANEN T T; RANTALA J; TOERMAENEN T

Patent Family (3 patents, 110 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update
WO 2006024693	A1	20060309	WO 2005FI373	A	20050831	200624 B
US 20060058487	A1	20060316	US 2004605553	P	20040831	200624 E
			US 2005644304	P	20050118	
			US 2005215303	A	20050831	
EP 1787319	A1	20070523	EP 2005777305	A	20050831	200735 E
			WO 2005FI373	A	20050831	

Priority Applications (no., kind, date): US 2004605553 P 20040831; US 2005644304 P 20050118; US 2005215303 A 20050831

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
WO 2006024693	A1	EN	45	2	

National Designated States,Original: AE AG AL AM AT AU AZ BA BB BG BR BW BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KM KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NA NG NI NO NZ OM PG PH PL PT RO RU SC SD SE SG SK SL SM SY TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

Regional Designated States,Original: AT BE BG BW CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IS IT KE LS LT LU LV MC MW MZ NA NL OA PL PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW

US 20060058487	A1	EN	Related to Provisional	US 2004605553
			Related to Provisional	US 2005644304
EP 1787319	A1	EN	PCT Application	WO 2005FI373
			Based on OPI patent	WO 2006024693

Regional Designated States,Original: AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

Technology Focus

...g/mol, where M is silicon and O is oxygen; a modulus of 8 (preferably 10) gigapascal or more; and a density of 1.2 (preferably 1.65) g/cm3 or more...

26/3,K/4 (Item 3 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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0014018589 - Drawing available

WPI ACC NO: 2004-200240/200419

XRAM Acc No: C2004-079247

XRPX Acc No: N2004-158869

Reducing image defects in electrostatographic image for discharged or charged area development, by using primary imaging member having outermost layer of silicon carbide having specified Young's modulus

Patent Assignee: NEXPRESS SOLUTIONS LLC (NEXP-N)

Inventor: BORSENBERGER P M; RIMAI D S; VISSER S A

Patent Family (1 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update
US 6649314	B1	20031118	US 2000506159	A	20000217	200419 B

Priority Applications (no., kind, date): US 2000506159 A 20000217

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
US 6649314	B1	EN	11	2	

Original Publication Data by Authority

Claims:

...silicon carbide in said outermost layer having a Young's modulus of at least about 10 gigapascals ;imagewise exposing said primary imaging member at said exposing station, thereby forming a latent image on said imaging member;developing said latent image with...

26/3,K/5 (Item 4 from file: 350)
DIALOG(R) File 350:Derwent WPIX
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0009991473 - Drawing available

WPI ACC NO: 2000-294849/200026

XRAM Acc No: C2000-089263

XRPX Acc No: N2000-221194

Building work reinforcement fabric has high modulus warps and wefts coated with thermo adhesive material to give improved binding

Patent Assignee: CREDALI L (CRED-I)

Inventor: CREDALI L

Patent Family (5 patents, 25 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update
EP 994223	A1	20000419	EP 1999119833	A	19991007	200026 B
IT 1302656	B	20000929	IT 1998MI2195	A	19981013	200215 E
EP 994223	B1	20051207	EP 1999119833	A	19991007	200582 E
DE 69928741	E	20060112	DE 69928741	A	19991007	200613 E
			EP 1999119833	A	19991007	
DE 69928741	T2	20060810	DE 69928741	A	19991007	200654 E
			EP 1999119833	A	19991007	

Priority Applications (no., kind, date): IT 1998MI2195 A 19981013; EP 1999119833 A 19991007

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
EP 994223	A1	EN	17	6	
Regional Designated States,Original: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI					
EP 994223	B1	EN			
Regional Designated States,Original: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE					

DE 69928741	E	DE	Application EP 1999119833
			Based on OPI patent EP 994223
DE 69928741	T2	DE	Application EP 1999119833
			Based on OPI patent EP 994223

Original Publication Data by Authority

Claims:

...die Kette aus Faden (11) aus hochmodulen Fasern mit einem Elastizitätsmodul unter Zugbeanspruchung grosser als 10 GPa (Gigapascal) und mit einer Zugfestigkeit grosser als 600 MPa (Megapascal) besteht und welches dadurch gekennzeichnet ist, dass der Schuss aus Glasfaden (12...

...11) de fibres a modules eleves, ayant un coefficient d'elasticite sous tension superieur a 10 GPa (gigapascal) et une limite elastique a la tension superieure a 600 MPa (megapascal), et caracterise en ce que la trame est constituee de fils de verre (12) revetus d'une matiere polymere thermo-collant...

26/3,K/6 (Item 5 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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0003389266

WPI ACC NO: 1985-156847/198526

XRAM Acc No: C1985-068613

Ultrahigh mol. wt. polypropylene moulding - with extremely high tensile elastic modulus and breaking strength

Patent Assignee: TONEN SEKIYU KAGAKU KK (TNEN)

Inventor: KANEMOTO T; TAKEDA M; TANAKA K; TSURUTA M

Patent Family (2 patents, 1 countries)

Patent			Application			
Number	Kind	Date	Number	Kind	Date	Update
JP 60089333	A	19850520	JP 1983196130	A	19831021	198526 B
JP 1991041055	B	19910620	JP 1983196130	A	19831021	199129 E

Priority Applications (no., kind, date): JP 1983196130 A 19831021

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
JP 60089333	A	JA	5	0	

Alerting Abstract ...av. mol. wt. of 1,000,000 or more, and its tensile elastic modulus is 10 gigapascal or more and its breaking strength, 0.6 gigapascal or more. Or the tensile elastic...

?

28/3,K/1 (Item 1 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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0011119691 - Drawing available

WPI ACC NO: 2002-055892/200208

XRPX Acc No: N2002-041193

Method of sound control for a building construction, using sheets of material positioned together, at least one sheet being high density gypsum fiber board, and another being plaster board

Patent Assignee: FLETCHER BUILDING HOLDINGS LTD (FLET-N); FLETCHER CHALLENGE LTD (FLET-N)

Inventor: GOLDING K J; HALLOWS R M

Patent Family (3 patents, 2 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update
AU 200128096	A	20010920	AU 200128096	A	20010319	200208 B
NZ 503475	A	20020927	NZ 503475	A	20000317	200272 E
AU 783624	B2	20051117	AU 200128096	A	20010319	200638 E

Priority Applications (no., kind, date): NZ 505069 A 20000609; NZ 503475 A 20000317

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
AU 200128096	A	EN	26	11	
NZ 503475	A	EN			

Alerting Abstract ...a thickness of 5 - 20 mm, and the flexural stiffness should be 1.5 - 5 gigapascals .

...

...INDEPENDENT CLAIM is given for a multi-layer assembly of sheets of material to provide inter surface damping in a building construction

?

34/3,K/1 (Item 1 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2007 The Thomson Corporation. All rts. reserv.

0014772346 - Drawing available
WPI ACC NO: 2005-120011/200513
XRAM Acc No: C2005-039955
XRPX Acc No: N2005-103494

Data storage medium for internal disk drives comprises a substrate
containing at least one polyimide
Patent Assignee: GENERAL ELECTRIC CO (GENE)
Inventor: CELLA J; CELLA J A; DRIS I; HERMANN E D; HERRMANN E; HERRMANN E D
; KERBOUA R; REITZ J; REITZ J B

Patent Family (8 patents, 107 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update
US 20040265605	A1	20041230	US 2003603497	A	20030624	200513 B
WO 2005005515	A1	20050120	WO 2004US18519	A	20040610	200513 E
EP 1641861	A1	20060405	EP 2004754951	A	20040610	200624 E
			WO 2004US18519	A	20040610	
AU 2004256057	A1	20050120	AU 2004256057	A	20040610	200660 E
KR 2006064573	A	20060613	WO 2004US18519	A	20040610	200674 E
			KR 2005724848	A	20051223	
US 7147906	B2	20061212	US 2003603497	A	20030624	200701 E
CN 1835989	A	20060920	CN 200480023362	A	20040610	200706 E
JP 2007526587	W	20070913	WO 2004US18519	A	20040610	200762 E
			JP 2006517217	A	20040610	

Priority Applications (no., kind, date): US 2003603497 A 20030624

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
US 20040265605	A1	EN	11	0	
WO 2005005515	A1	EN			

National Designated States, Original: AE AG AL AM AT AU AZ BA BB BG BR BW
BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE EG ES FI GB GD GE GH GM HR
HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW
MX MZ NA NI NO NZ OM PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR
TT TZ UA UG US UZ VC VN YU ZA ZM ZW

Regional Designated States, Original: AT BE BG BW CH CY CZ DE DK EA EE ES
FI FR GB GH GM GR HU IE IT KE LS LU MC MW MZ NA NL OA PL PT RO SD SE SI
SK SL SZ TR TZ UG ZM ZW

EP 1641861 A1 EN PCT Application WO 2004US18519
Based on OPI patent WO 2005005515

Regional Designated States, Original: AT BE BG CH CY CZ DE DK EE ES FI FR
GB GR HU IE IT LI LU MC NL PL PT RO SE SI SK TR

AU 2004256057 A1 EN Based on OPI patent WO 2005005515

KR 2006064573 A KO PCT Application WO 2004US18519

Based on OPI patent WO 2005005515

JP 2007526587 W JA 20 PCT Application WO 2004US18519

Based on OPI patent WO 2005005515

Data storage medium for internal disk drives comprises a substrate
containing at least one polyimide

Original Titles:

DATENTRAGER BEINHALTEND POLYIMIDE

...

...DATA STORAGE MEDIUM COMPRISING POLYIMIDES

...

...SUPPORT DE STOCKAGE DE DONNEES COMPRENANT DES POLYIMIDES

...

...Data storage medium comprising polyimides

...

...Data storage medium comprising polyimides

...

...DATA STORAGE MEDIUM COMPRISING POLYIMIDES

...

...SUPPORT DE STOCKAGE DE DONNEES COMPRENANT DES POLYIMIDES

Alerting Abstract ...NOVELTY - A storage medium comprises a substrate having a physical portion of at least one polyimide , and at least one data layer on the substrate.DESCRPTION - A storage medium comprises a substrate having a physical portion of at least one polyimide , and at least one data layer on the substrate. The polyimide comprises structural units of formula (I...

...USE - As a storage medium for storing data (claimed) in vibration damping materials useful in e.g. automobiles, printed circuit boards and spindle motors in internal disk drive applications...

...ADVANTAGE - The composition has a mechanical damping coefficient at a frequency of about 1.6 hertz of at least 0.019 at about...

Technology Focus

POLYMERS - Preferred Components: The polyimide composition is a miscible blend comprising a second polyimide .

Extension Abstract

...phenylenediamine instead of the mixture (BPADA) and 3,3'-dimethyl-4,4'-diamino biphenyl. The polyimides were tested for mechanical damping coefficient (Tg), damping coefficients (tan delta) at 25, 50 and 100(deg)C and maximum tan delta value. The...

Title Terms.../Index Terms/Additional Words: POLYIMIDE

Class Codes

International Classification (+ Attributes)

IPC + Level Value Position Status Version

... G11B-0005/62 ...

... G11B-0005/73 ...

... G11B-0007/24 ...

... G11B-0005/73 ...

... G11B-0007/253

... G11B-0005/62 ...

... G11B-0007/24 ...

... G11B-0005/62 ...

... G11B-0007/24

Original Publication Data by Authority

Original Abstracts:

...storage medium comprising: a) a substrate, a physical portion of which comprises at least one polyimide , and b) at least one data layer on the substrate. The substrate comprising a polyimide exhibits low axial displacement and beneficial damping characteristics...

...storage medium comprising: a) a substrate, a physical portion of which comprises at least one polyimide , and b) at least one data layer on the substrate. The substrate comprising a polyimide exhibits low axial displacement and beneficial damping characteristics...

...storage medium comprising: a) a substrate, a physical portion of which comprises at least one polyimide , and b) at least one data layer on the substrate. The substrate comprising a polyimide exhibits low axial displacement and beneficial damping characteristics...

...storage medium comprising: a) a substrate, a physical portion of which comprises at least one polyimide , and b) at least one data layer on the substrate. The substrate comprising a polyimide exhibits low axial displacement and beneficial damping characteristics...

...stockage de donnees comprenant: a) un substrat dont une partie physique comprend au moins un polyimide , et; b) au moins une couche de stockage de donnees qui se trouve sur ledit substrat. Ce substrat, qui comprend un polyimide , presente des caracteristiques telles qu'un faible deplacement axial et un amortissement favorable.

Claims:

...storage medium comprising:a) a substrate, a physical portion of which comprises at least one polyimide , andb) at least one data layer on the substrate;the at least one polyimide comprising structural units of the formula:[C00012]wherein "A" comprises structural units of the formulae...

...storage medium comprising: a) a substrate, a physical portion of which comprises at least one polyimide , andb) at least one data layer on the substrate;wherein said polyimide has a mechanical damping coefficient of at least about 0.028 at a temperature of about 50(deg) C. at a frequency of about 1.6 hertz; and wherein the at least one polyimide comprising structural units of the formula:[CF C00012]wherein "A" comprises structural units of the...

34/3,K/2 (Item 2 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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0009773404 - Drawing available
WPI ACC NO: 2000-060978/200005
XRPX Acc No: N2000-047712

Acoustic noise emission controller for disc drive used in data recording from magnetic disc

Patent Assignee: SEAGATE TECHNOLOGY INC (SEAG-N)

Inventor: MYLABATHULA E; WOLDEMAR C M

Patent Family (1 patents, 1 countries)

Patent

Application

Number

Kind

Date

Number

Kind

Date

Update

```
...vibrations of said printed circuit board and said foam gasket comprising
a thick open cell polyurethane foam selected for its high damping
characteristics thereby reduce noise on said disc drive.>
```

34/3,K/3 (Item 3 from file: 350)
DIALOG(R) File 350:Derwent WPIX
(c) 2007 The Thomson Corporation. All rts. reserv.

0009647941 - Drawing available

WPI ACC NO: 1999-600169/199951

XRPX Acc No: N1999-442350

Box shaped part for damping noise from hard disk drives , especially
SCSI type hard disks - has hard disk supported inside box on supports
that maintain gap for air circulation

Patent Assignee: LAP POWER AB (LAPP-N)

Inventor: PERSSON C L U W

Patent Family (1 patents, 1 countries)

Patent			Application			Update	
Number	Kind	Date	Number	Kind	Date		
SE 199800721	A	19990905	SE 1998721	A	19980304	199951	B

Priority Applications (no., kind, date): SE 1998721 A 19980304

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing	Notes
SE 199800721	A	SV	13	5		

Box shaped part for damping noise from hard disk drives , especially
SCSI type hard disks...

Alerting Abstract ...NOVELTY - The box-shaped part (1) contains at least
two supports for the hard disk drive inserted into the box, which are
used to keep it clear from the inside surfaces...

...air to flow out of. MECHANICAL ENGINEERING - PREFERRED FEATURES : The
supports comprise an elastic, vibration damping material such as foamed
rubber or plastic, whilst the box and its cover are made from a high
density material with a high noise damping capacity, e.g. iron or
steel. Alternatively the cover can be made from a different...

...a perspective view of the front section of a box-shaped part, inside
which the hard disk drive is fitted. (1) Box-shaped part; (4, 5)
Openings in box part cover; (6) Flange...

Class Codes

International Classification (+ Attributes)

IPC + Level Value Position Status Version

... G11B-0033/08 ...

... G11B-0033/14

... G11B ...

... G11B-0033/08 ...

... G11B-0033/14

34/3,K/4 (Item 4 from file: 350)
DIALOG(R) File 350:Derwent WPIX
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0009175153 - Drawing available

WPI ACC NO: 1999-098695/199909

XRAM Acc No: C1999-029357

XRPX Acc No: N1999-071969

Disk drive damping arrangement - has two dampers with differing damping factors, one of which damps motion of a disk drive assemble relative to a carriage

Patent Assignee: MOTOROLA ISRAEL LTD (MOTI)

Inventor: ALON Y; INBAL N; MOSSERI Y; ZELIG A

Patent Family (1 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update
GB 2328263	A	19990217	GB 199717232	A	19970815	199909 B

Priority Applications (no., kind, date): GB 199717232 A 19970815

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
GB 2328263	A	EN	18	6	

Disk drive damping arrangement...
...has two dampers with differing damping factors, one of which damps motion of a disk drive assemble relative to a carriage

Alerting Abstract ...8,9-12) with different damping factors, the second of which damps motion of a disk drive assembly relative to a carriage (16...

...Also claimed is a method for cushioning a disk drive including providing a dummy load for increasing the disk drive mass. A damper is provided for damping low frequency vibration. A second damper is provided for damping a shock of high frequency...

...ADVANTAGE - Compensates for production tolerances of the disk drive and frame and temperature variation. Reduces short circuits and damage. A smaller box is required.

Documentation Abstract

...8,9-12) with different damping factors, the second of which damps motion of a disk drive assembly relative to a carriage (16...

...Also claimed is a method for cushioning a disk drive including providing a dummy load for increasing the disk drive mass. A damper is provided for damping low frequency vibration. A second damper is provided for damping a shock of high frequency...

...ADVANTAGE - Compensates for production tolerances of the disk drive and frame and temperature variation. Reduces short circuits and damage. A smaller box is required...

...of elastomeric material and damp motion in different ranges of movement. The first damper is silicone - rubber, cone-shaped, permits a range of motion in a cone axial plane, and exhibits a...

...0.5 kg. A resonant frequency of the damper is symmetrical in all directions. The disk drive assembly has a mass matched to a resonant frequency of at least one of the dampers. The second damper is a high damping rubber snubber and an inverted U-shaped cage closed on three sides limits the snubber movement. A phosphor-bronze frame provides extra mass to the disk drive. A leaf spring provides a clamp force to the disk drive and a plate holds the frame (18). The carriage has at least

one contact spring...

...PREFERRED METHOD - A side holder including a leaf spring to clamp the disk drive to the metal frame.

Class Codes

International Classification (Main): G11B-033/14

34/3,K/5 (Item 5 from file: 350)
DIALOG(R) File 350:Derwent WPIX
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0005694708 - Drawing available

WPI ACC NO: 1991-307042/199142

XRAM Acc No: C1991-133155

XRFX Acc No: N1991-235284

Optical head guide member - comprises body section engaging with heat supported by second material which damps vibration

Patent Assignee: MATSUSHITA ELEC IND CO LTD (MATU)

Inventor: GOTO S; KAWAMURA I; YAMAMOTO H

Patent Family (1 patents, 1 countries)

Patent	Application
Number	Kind Date Number Kind Date Update
JP 3205662	A 19910909 JP 19901224 A 19900108 199142 B

Priority Applications (no., kind, date): JP 19901224 A 19900108

Alerting Abstract ...The recording and reproducing unit comprises: (A) a motor drives a disc recording medium; (b) a recording and reproducing head records information on the recording medium and...

...material comprises a metal, ceramics having rigidity. The second material comprises a resin, or hard rubber having high vibration damping capability...

Class Codes

International Classification (+ Attributes)

IPC + Level Value Position Status Version

G11B-0021/02 ...

G11B-0021/02 ...

?

36/3,K/1 (Item 1 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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0015201279

WPI ACC NO: 2005-551292/200556

Related WPI Acc No: 2007-795415

XRAM Acc No: C2005-166308

Flower-like nano-particle composition for rubber composition,
thermoplastic elastomer composition, hard disk drive composition, or
matrix composition, comprises surface layer comprising monomer units

Patent Assignee: BRIDGESTONE CORP (BRID)

Inventor: HALL J E; OZAWA Y; WANG X

Patent Family (2 patents, 1 countries)

Patent			Application			
Number	Kind	Date	Number	Kind	Date	Update
US 20050154117	A1	20050714	US 2004755648	A	20040112	200556 B
US 7205370	B2	20070417	US 2004755648	A	20040112	200728 E

Priority Applications (no., kind, date): US 2004755648 A 20040112

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing	Notes
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US 20050154117	A1	EN	12	2		
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Flower-like nano-particle composition for rubber composition,
thermoplastic elastomer composition, hard disk drive composition, or
matrix composition, comprises surface layer comprising monomer units

Alerting Abstract ...USE - For rubber composition, thermoplastic
elastomer composition, hard disk drive composition, or matrix
composition (claimed...

...composition. The thermoplastic composition incorporating the flower-like
nanoparticles produces molded products having heat resistance, high
elasticity, excellent damping and super soft properties. A rubber
composition incorporating the flower-like nanoparticles demonstrates high
hysteresis, good tensile strength, strong resistance to...

Extension Abstract

...dropped into an acetone/isopropanol ((similar)95/5) blend, and dried.
The product showed that polybutadiene segment had molecular weight of
56700. The flower-like particles were delaminated. The average particle...

Title Terms.../Index Terms/Additional Words: RUBBER ;

36/3,K/2 (Item 2 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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0010535313

WPI ACC NO: 2001-137806/200114

Related WPI Acc No: 1998-193576; 1998-193690; 1999-095704; 2001-299777

XRAM Acc No: C2001-040437

New composition useful in sound management, comprises at least one
substantially random interpolymer and at least one organic acid or its
salts

Patent Assignee: DOW CHEM CO (DOWC)

Inventor: BETSO S R; CLAYFIELD T E; HOENIG S M; WALTHER B W

Patent Family (5 patents, 92 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update
WO 2000078860	A1	20001228	WO 2000US15232	A	20000601	200114 B
AU 200051784	A	20010109	AU 200051784	A	20000601	200122 E
US 6319969	B1	20011120	US 1997882819	A	19970626	200174 E
			US 1999374096	A	19990812	
EP 1203053	A1	20020508	EP 2000936469	A	20000601	200238 E
			WO 2000US15232	A	20000601	
JP 2003503529	W	20030128	WO 2000US15232	A	20000601	200309 E
			JP 2001505614	A	20000601	

Priority Applications (no., kind, date): US 1997882819 A 19970626; US 1999139999 P 19990618; US 1999374096 A 19990812

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
WO 2000078860	A1	EN	56	1	
National Designated States,Original: AE AG AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW					
Regional Designated States,Original: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TZ UG ZW					
AU 200051784	A	EN			Based on OPI patent WO 2000078860
US 6319969	B1	EN			C-I-P of application US 1997882819
					C-I-P of patent US 5973049
EP 1203053	A1	EN			PCT Application WO 2000US15232
					Based on OPI patent WO 2000078860
Regional Designated States,Original: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI					
JP 2003503529	W	JA	74		PCT Application WO 2000US15232
					Based on OPI patent WO 2000078860

Alerting Abstract ...devices for modifying the sound of a drum, loudspeaker systems, composite sound walls, acoustically damped disc drive systems, mufflers, thermoformable acoustical mat compositions, sound damping units for vacuum cleaning machines, systems for reducing drag and noise of underwater vehicles, automotive headliners, sound damped auto motive enclosures such as oil pans, high heat, sound damping metal-polymer laminates, molded carpet assemblies with sound deadening backing, vibration-damping constrained-layer constructions, conveyor belts and material transfer systems, sound insulation moldable carpets, non-squeal disc brake pads, coatings for wires and similar...

Technology Focus

...random polymer (SBR), ethylene octene co-polymer (EO), polypropylene (PP), polypropylene copolymer (CPP) and/or polyvinylchloride (PVC)).
(1) and/or the second polymer are crosslinked...

36/3,K/3 (Item 3 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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0009730042

WPI ACC NO: 2000-015145/200002

XRAM Acc No: C2000-003232

XRPX Acc No: N2000-011924

Centipede polymers grafted with hydrogenated block copolymers and polypropylene, used to form gels used in applications requiring high

damping properties

Patent Assignee: BRIDGESTONE CORP (BRID)

Inventor: FOLTZ V J; HALL J E; MASHITA N; MASHITA S; MATSUSE T; TAKECHI H;
TAKEICHI H; TOYOSAWA S; WANG X

Patent Family (4 patents, 28 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update
EP 955329	A1	19991110	EP 1999107308	A	19990419	200002 B
JP 11343320	A	19991214	JP 1999120365	A	19990427	200009 E
CA 2270372	A1	19991106	CA 2270372	A	19990428	200015 E
US 6054532	A	20000425	US 199873617	A	19980506	200027 E

Priority Applications (no., kind, date): US 199873617 A 19980506

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
EP 955329	A1	EN	16	0	
Regional Designated States, Original: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI					
JP 11343320	A	JA	16		
CA 2270372	A1	EN			

...grafted with hydrogenated block copolymers and polypropylene, used to form gels used in applications requiring high damping properties

Alerting Abstract ...and cushion materials, for reducing vibration in fans, air-conditioners, laundry machines, etc., as a damping material in portable compact disc and mini-disc players, microphone holders, hard disk drives, floppy disk drives, CD-ROM drives and optical disk drives, motors, the printer head of a word-processor and other small or middle-size printers, as an impact-reducing material in sports goods and shoes, as a super-low-hardness rubber, as a low-hardness plastic molding material, for controlling the release of fragrances, medical materials...

...ADVANTAGE - The grafted centipede polymers are soft, high - damping, high elasticity materials with heat resistance up to 100(deg)C.

Original Publication Data by Authority

Original Abstracts:

The present invention teaches a method for enabling the formation of a high damping, soft polymer gel. The method includes: reacting a poly(alkenyl benzene-co-maleimide) polymer with a maleated polyalkylene and ...

...The present invention teaches a method for enabling the formation of a high damping, soft polymer gel. The method includes: reacting a poly(alkenyl benzene-co-maleimide) polymer with a maleated polyalkylene and a...

36/3,K/4 (Item 4 from file: 350)

DIALOG(R) File 350:Derwent WPIX

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0009252879

WPI ACC NO: 1999-180480/199915

XRAM Acc No: C1999-052579

Composite damping material of a porous material

Patent Assignee: GORE ENTERPRISE HOLDINGS INC (GORE)

Inventor: GENTILE M M; PRINCIPE F; SUTTON S P

Patent Family (8 patents, 75 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update
WO 1999007775	A1	19990218	WO 1998US11047	A	19980529	199915 B
AU 199877086	A	19990301	AU 199877086	A	19980529	199928 E
US 5965249	A	19991012	US 1997908619	A	19970807	199949 E
EP 1002008	A1	20000524	EP 1998925050	A	19980529	200030 E
			WO 1998US11047	A	19980529	
CN 1266447	A	20000913	CN 1998808048	A	19980529	200062 E
JP 2001512763	W	20010828	WO 1998US11047	A	19980529	200156 E
			JP 2000506266	A	19980529	
EP 1002008	B1	20020320	EP 1998925050	A	19980529	200221 E
			WO 1998US11047	A	19980529	
DE 69804318	E	20020425	DE 69804318	A	19980529	200235 E
			EP 1998925050	A	19980529	
			WO 1998US11047	A	19980529	

Priority Applications (no., kind, date): US 1997908619 A 19970807

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
WO 1999007775	A1	EN	87		
National Designated States,Original: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH HU IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN YU ZW					
Regional Designated States,Original: AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE					
AU 199877086	A	EN			Based on OPI patent WO 1999007775
EP 1002008	A1	EN			PCT Application WO 1998US11047
Based on OPI patent WO 1999007775					
Regional Designated States,Original: DE FR GB IT SE					
JP 2001512763	W	JA	85		PCT Application WO 1998US11047
Based on OPI patent WO 1999007775					
EP 1002008	B1	EN			PCT Application WO 1998US11047
Based on OPI patent WO 1999007775					
Regional Designated States,Original: DE FR GB IT SE					
DE 69804318	E	DE			Application EP 1998925050
PCT Application WO 1998US11047					
Based on OPI patent EP 1002008					
Based on OPI patent WO 1999007775					

Composite damping material of a porous material

Original Titles:

...VIBRATION DAMPING COMPOSITE MATERIAL

...

...VIBRATION DAMPING COMPOSITE MATERIAL

...

...Vibration damping composite material .

...

...VIBRATION DAMPING COMPOSITE MATERIAL

Alerting Abstract ...1 Composite damping material comprises a porous material (2) and a second material (1) having a mechanical droop time of less than 10⁻⁴ seconds within the pores of the porous material . The

resulting damping material has a mechanical droop displacement less than 1mm, and a dynamic loss modulus master curve...

...point in the frequency range 0.1 to 105 Hz. Also claimed is such a damping material bonded to a surface susceptible to vibration. In damping vibration of a surface of a disc drive assembly, vehicle, aircraft, sports equipment, electronic or electronic cable, or machining system. Incorporation of mechanically unstable second material within the pores of a relatively stable material provides a material with outstanding damping properties with negligible cold flow. In the EMBODIMENTS the porous material can be ceramic, glass, metal or, particularly, polytetrafluoroethylene. The second material can be epoxy, fluorocarbon, polyurethane, acrylic, silicone, polyisobutylene or, particularly, oligomeric perfluorocarbon or uncured novolak epoxy resin. The figure shows the damping material . porous material 1 unstable damping material .2

Original Publication Data by Authority

Original Abstracts:

A new composite damping material is presented which exhibits an enhanced ability to dampen mechanical oscillations. The enhanced damping properties of this material are achieved through the entrapment of highly viscous damping fluids within the pores of a porous material (such as: an expanded polymer, felt, foam, fabric, metal, etc.). The entrapment of the fluid...

...composite which may be shaped into useful articles. Such a construct allows utilization of the high performance damping properties of fluids which, in pure form, are too fluid-like for most practical applications (which typically require a solid, stable, material). This composite, possessing damping performance approaching that of certain fluids, combined with stability in a solid form, can be used in many applications...

...which produce noise or degrade performance in airplanes, automobiles, space structures, machine tools, sporting goods, disk drive components and assemblies, electrical /electronic components such as transformers, electrical cables, etc. In addition, these composites may be used...

...A new composite damping material is presented which exhibits an enhanced ability to dampen mechanical oscillations. The enhanced damping properties of this material are achieved through the entrapment of highly viscous damping fluids within the pores of a porous material (such as: an expanded polymer, felt, foam, fabric, metal, etc.). The entrapment of the fluid within the porous...

...be shaped into useful articles. Such a construct allows utilization of the high performance damping properties of fluids which, in pure form, are too fluid-like for most practical applications (which typically require a solid, stable, material). This composite, possessing damping performance approaching that of certain fluids, combined with stability in a solid form, can be used in many applications where materials are needed to...

...or degrade performance in airplanes, automobiles, space structures, machine tools, sporting goods, disk drive components and assemblies, electrical/electronic components such as transformers, electrical

cables, etc. In addition, these composites may be used to alter or tune the ...

...A new composite damping material is presented which exhibits an enhanced ability to dampen mechanical oscillations. The enhanced damping properties of this material are achieved through the entrapment of highly viscous damping fluids within the pores of a porous material (such as: an expanded polymer, felt, foam, fabric, metal, etc.). The entrapment of the fluid within the porous scaffold prevents flow...

...be shaped into useful articles. Such a construct allows utilization of the high performance damping properties of fluids which, in pure form, are too fluid-like for most practical applications (which typically require a solid, stable, material). This composite, possessing damping performance approaching that of certain fluids, combined with stability in a solid form, can be used in many applications where materials are needed to damp the vibration of mechanical...

...or degrade performance in airplanes, automobiles, space structures, machine tools, sporting goods, disk drive components and assemblies, electrical/electronic components such as transformers, electrical cables, etc. In addition, these composites may be used to alter or tune the mechanical response of a variety...

Claims:

...A composite damping material comprised of: a) a porous material, and at least one second material having a mechanical droop time, as defined by test method 3, of less than 104 seconds, said second material being within the pores of said porous material...

...A composite damping material comprised of: a) a porous material, and b) at least one second material having a...

...curve value greater than 1×10^9 dyne/cm² at at least one point within the frequency band between 0.1 and 105 Hz.

36/3,K/5 (Item 5 from file: 350)
DIALOG(R) File 350: Derwent WPIX
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0005713818 - Drawing available

WPI ACC NO: 1991-327404/199145

XRAM Acc No: C1991-141397

XRPX Acc No: N1991-250778

GRP reinforced rubber couplings between coaxial drive clutch plates - to dampen transfer of vibration along drive train

Patent Assignee: HUTCHINSON (HUTC).

Inventor: SIMON J; SIMON J M

Patent Family (5 patents, 10 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update
EP 455556	A	19911106	EP 1991401151	A	19910430	199145 B
FR 2661720	A	19911108	FR 19905666	A	19900504	199204 E
US 5211606	A	19930518	US 1991694976	A	19910506	199321 E
EP 455556	B1	19940601	EP 1991401151	A	19910430	199421 E
DE 69102200	E	19940707	DE 69102200	A	19910430	199427 E
			EP 1991401151	A	19910430	

Priority Applications (no., kind, date): FR 19905666 A 19900504

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing	Notes
EP 455556	A	EN				
Regional Designated States,Original: BE DE ES GB IT LU NL SE						
US 5211606	A	EN	6	4		
EP 455556	B1	FR	8	4		
Regional Designated States,Original: BE DE ES GB IT LU NL SE						
DE 69102200	E	DE			Application	EP 1991401151
					Based on OPI patent	EP 455556

GRP reinforced rubber couplings between coaxial drive clutch plates...

Alerting Abstract ...body (6) within which are strips (3, 4) of a material having a relatively high modulus of elasticity, positioned and oriented so that when power is transmitted from one flanking disc (1) to...

...is made of a butyl or EPDM (ethylene-propylene-dimer terpolymer) or SBR (styrene-butadiene) rubber. The amt. of relative angular displacement of the discs (1, 2) may be limited by...

Equivalent Alerting Abstract ...vibrations when drive torque is applied, and blade(s) of composite material with high relative modulus of elasticity w.r.t. the mass providing a progressive transmission of torque between discs by flexion...

Title Terms.../Index Terms/Additional Words: RUBBER ;

Original Publication Data by Authority

Original Abstracts:

...flexible coupling between two coaxial rotating discs, the driving disc being intended to turn the driven disc in one direction or the other in such a way that the transmission of the torque...

...that said elastic element consists essentially of a composite material 3 having a relatively high modulus of elasticity, connected to an elastic damping mass 6...

...A device for damped resilient coupling between two coaxial rotary discs, the driving disc driving the driven disc in rotation in one direction or in the other so that transmission of the drive torque may take ...

...element. The resilient element is formed essentially of a composite material (3) with relatively high modulus of elasticity, and is associated with a resilient damping mass (6).

Claims:

...device between two rotating driving and driven discs (1, 2), coaxial and parallel, the driving disc being intended to drive the driven disc (2) in rotation in one direction or the other so that the driving torque can be transmitted progressively at least in one given angular range ...

...elastic torque-transmission member, consisting essentially of a composite material (3) with a relatively high modulus of elasticity, associated with an elastic damping body (6), characterised in that the said composite material (3) is in the form of at least one strip or an assembly of parallel strips...

...in such a way, between the corresponding supports (4, 5), fixed respectively to the driving disc (1) and the driven disc (2), that the transmission of the torque between these discs (1, 2) is achieved essentially by bending of the said strips, and the damping by...

...transmission of a drive torque between two coaxial and parallel rotary discs, the first rotary disc being a driving disc and the second rotary disc being a driven disc, said device comprising: a resilient damping mass, disposed between the discs, for providing damping of vibrations between the discs by shearing of said damping mass when the drive torque...

...disk; at least one blade formed of a composite material and having a relatively high modulus of elasticity with respect to said resilient damping mass, said blade being embedded in said resilient damping mass and providing a progressive transmission of the drive torque between the discs by a...

36/3,K/6 (Item 6 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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0005694728 - Drawing available
WPI ACC NO: 1991-307062/199142
XRPX Acc No: N1991-235304
Gas-blast power breaker - has mechanism for gas intake chamber connected to gas exhaust space when gas pressure in gas cylinder exceeds set value

NoAbstract Dwg 1/11

Patent Assignee: CLARION CO LTD (CLAQ); HITACHI LTD (HITA)

Inventor: KOBAYASHI S; KOYANAGI O; SEKI Y; TSUKUSHI M

Patent Family (2 patents, 2 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update
JP 3205724	A	19910909	JP 1990552	A	19900108	199142 B
US 5152496	A	19921006	US 1991640048	A	19910109	199243 E

Priority Applications (no., kind, date): JP 1990552 A 19900108; JP 1990552 A 19900110

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
US 5152496	A	EN	12	11	

Alerting Abstract ...The recording and reproducing unit comprises: (A) a motor drives a disc recording medium; (b) a recording and reproducing head records information on the recording medium and...

...material comprises a metal, ceramics having rigidity. The second material comprises a resin, or hard rubber having high vibration damping capability...

36/3,K/7 (Item 7 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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0005694721 - Drawing available
WPI ACC NO: 1991-307055/199142
Related WPI Acc No: 1998-277516

XRPX Acc No: N1991-235297

Low-vacuum detector for vacuum circuit breaker - has zero-phase current transformer for detecting earth current in power cable due to discharge in vacuum valve Dwg 1/13

Patent Assignee: FUJI ELECTRIC MFG CO LTD (FJIE)

Inventor: IWAI H; SHIBATA K; SUZUKI N; USUI N; YAGI Y

Patent Family (1 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update
JP 3205716	A	19910909	JP 1989259350	A	19891004	199142 B
			JP 199051053	A	19900302	

Priority Applications (no., kind, date): JP 199051053 A 19900302

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
JP 3205716	A	JA	5	6	

Alerting Abstract ...The recording and reproducing unit comprises: (A) a motor drives a disc recording medium; (b) a recording and reproducing head records information on the recording medium and...

...material comprises a metal, ceramics having rigidity. The second material comprises a resin, or hard rubber having high vibration damping capability...

36/3,K/8 (Item 8 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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0005694719 - Drawing available

WPI ACC NO: 1991-307053/199142

Related WPI Acc No: 1991-018920

XRPX Acc No: N1991-235295; N1992-000014

Electrical switch with reversible interlock mechanism - has translator arranged below actuator and interlock providing reversing in same direction as reversing action of actuator

Patent Assignee: JIMBO DENKI KK (JIMB-N); JIMBO ELECTRIC CO L (JIMB-N);

JIMBO ELECTRIC CO LTD (JIMB-N)

Inventor: FUJIYOSHI S

Patent Family (3 patents, 3 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update
JP 3205714	A	19910909	JP 1989262143	A	19891009	199142 B
			JP 1990161272	A	19900621	
			JP 1990161772	A	19900621	
US 5072086	A	19911210	US 1990511426	A	19900423	199201 E
KR 157406	B1	19981116	KR 19906186	A	19900501	200030 E

Priority Applications (no., kind, date): JP 1989109109 A 19890501; JP 1989262143 A 19891009; JP 1990161772 A 19900621

Alerting Abstract ...The recording and reproducing unit comprises: (A) a motor drives a disc recording medium; (b) a recording and reproducing head records information on the recording medium and...

...material comprises a metal, ceramics having rigidity. The second material comprises a resin, or hard rubber having high vibration damping capability...

38/3,K/1 (Item 1 from file: 350)
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0011047935 - Drawing available
WPI ACC NO: 2001-274668/200129
XRAM Acc No: C2001-083479
XRPX Acc No: N2001-196238

Elastic covering for paper machine rolls comprises a highly elastic outer layer and an inner layer with a high damping factor

Patent Assignee: VOITH PAPER PATENT GMBH (VOIJ); VOITH SULZER

PAPIERTECHNIK PATENT GMBH (VOIJ)

Inventor: SOHL C

Patent Family (5 patents, 25 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update
DE 19951038	A1	20010426	DE 19951038	A	19991022	200129 B
EP 1094154	A2	20010425	EP 2000115933	A	20000725	200131 E
US 6379290	B1	20020430	US 2000692324	A	20001020	200235 E
EP 1094154	B1	20040929	EP 2000115933	A	20000725	200464 E
DE 50007972	G	20041104	DE 50007972	A	20000725	200474 E
			EP 2000115933	A	20000725	

Priority Applications (no., kind, date): DE 19951038 A 19991022

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
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DE 19951038	A1	DE	5	2	
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EP 1094154	A2	DE			
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Regional Designated States,Original: AL AT BE CH CY DE DK ES FI FR GB GR

IE IT LI LT LU LV MC MK NL PT RO SE SI

EP 1094154	B1	DE			
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Regional Designated States,Original: DE FI FR GB SE

DE 50007972	G	DE			Application EP 2000115933
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Based on OPI patent EP 1094154

...paper machine rolls comprises a highly elastic outer layer and an inner layer with a high damping factor

...reinforced material. The outer layer (6), e.g. 8 mm thick, is a highly elastic material with a damping factor $\tan \delta$ less than 0.02. The inner layer (5), e.g. 12 mm thick, is of a material with a high damping factor of $\tan \delta$ greater than 0.05.

Original Publication Data by Authority

Original Abstracts:

...matrix material with embedded fibers. The matrix material of the functional layer includes an elastic material with a damping factor of $\tan \delta$ less than about 0.02 and the matrix material of the connecting layer includes a damping material with a damping factor of $\tan \delta$ greater than about 0.05. The process includes forming an outer functional layer with an elastic matrix material having a damping factor of $\tan \delta$ less than about 0.02 and embedded fibers, forming an inner connecting layer with a damping matrix material having a damping factor of $\tan \delta$ greater than about 0.05 and embedded fibers, and coupling the outer functional layer to the hard core through the inner connecting layer to form an elastic covering layer on an outside of...

Claims:

...embedded therein, with the matrix material (3') of the functional layer

(6) being a highly resilient material with a damping factor of $\tan \delta < 0.02$ and the matrix material (3) of the connection layer (5) being a highly damping material with a damping factor of $\tan \delta > 0.05$, with the damping factor being defined by the...

... E' and its imaginary portion E'' .

Rouleau destine...matrix material with embedded fibers, wherein said matrix material of said functional layer comprising an elastic material with a damping factor of $\tan \delta$ less than about 0.02 and said matrix material of said connecting layer comprising a damping material with a damping factor of $\tan \delta$ greater than about 0.05.
?

42/3,K/1 (Item 1 from file: 350)
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0013449142 - Drawing available
WPI ACC NO: 2003-540405/200351
Related WPI Acc No: 2006-260934
XRPX Acc No: N2003-428603

Hard disk drive used in personal computer, has damper formed of viscoelastic material layer, and interposed between screw and cover plate
Patent Assignee: SAMSUNG ELECTRONICS CO LTD (SMSU)
Inventor: CHOA S; JOA S H; JOAH S H; SOHN J; SOHN J S; SON J S
Patent Family (4 patents, 2 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update
US 20030048576	A1	20030313	US 2002175952	A	20020621	200351 B
KR 2003021961	A	20030315	KR 200155557	A	20010910	200353 E
KR 429842	B	20040503	KR 200155557	A	20010910	200458 E
US 7023657	B2	20060404	US 2002175952	A	20020621	200624 E

Priority Applications (no., kind, date): KR 200155557 A 20010910; US 2002175952 A 20020621

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
US 20030048576	A1	EN	15	9	
KR 429842	B	KO			Previously issued patent KR 2003021961

Hard disk drive used in personal computer, has damper formed of viscoelastic material layer, and interposed between screw...

Original Titles:

Hard disk drive having a damper for reducing vibrations...

... Hard disk drive having a damper for reducing vibrations

Alerting Abstract USE - Hard disk drive used in personal computer (PC...

...from being transferred to the cover plate, thus reducing noises and improving performance of the hard disk drive .

...

...vertical sectional view of the assembly structure of the housing and spindle motor of the hard disk drive .

Original Publication Data by Authority

Original Abstracts:

A hard disk drive having a vibration reducing damper is disclosed. The hard disk drive is provided with a damper which is interposed between a through hole provided at a cover plate and a...

...is preferable that the damper has a multi-layered structure in which at least one high stiffness layer has relatively higher stiffness and at least one low stiffness layer made of a viscoelastic material has relatively...

...generated by the spindle from being transferred to the cover plate, noises generated by the hard disk drive are reduced, and, in addition, since vibrations generated by the spindle motor are damped, disk fluttering is reduced...

...A hard disk drive having a vibration reducing damper is disclosed. The hard disk drive is provided with a damper which is interposed between a through hole provided at a cover plate and a screw joined to the upper...

...layer. It is preferable that the damper has a multi-layered structure in which at least one high stiffness layer has relatively higher stiffness and at least one low stiffness layer made of a viscoelastic material has relatively lower stiffness. With the above...

...generated by the spindle from being transferred to the cover plate, noises generated by the hard disk drive are reduced, and, in addition, since vibrations generated by the spindle motor are damped, disk fluttering is reduced.

Claims:

What is claimed is: 1. A hard disk drive comprising: a housing comprising a base plate and a cover plate provided with a through hole; a spindle motor comprising a shaft which is...

...What is claimed is: 1. A hard disk drive comprising: a housing comprising a base plate and a cover plate provided with a through...

...a spindle motor comprising a shaft which is supported on the base plate and the upper end of which is joined to the cover plate by a screw inserted through the through hole...

42/3,K/2 (Item 2 from file: 350)

DIALOG(R) File 350: Derwent WPIX

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0010520522 - Drawing available

WPI ACC NO: 2001-122036/200113

XRAM Acc No: C2001-035307

XRPX Acc No: N2001-089537

Actuator E-block for a rotary data storage device, e.g. hard disk drive, comprises an E-block body made of a reinforced metal matrix composite, and yoke and actuator arms made of solid material

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC).

Inventor: CHUNG G J; LINCOLN T R; PRATER W L

Patent Family (1 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update
US 6151198	A	20001121	US 1998193879	A	19981118	200113 B

Priority Applications (no., kind, date): US 1998193879 A 19981118

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
US 6151198	A	EN	9	8	

Actuator E-block for a rotary data storage device, e.g. hard disk drive, comprises an E-block body made of a reinforced metal matrix composite, and yoke and...

Alerting Abstract ...USE - Used for a rotary data storage device e.g.
hard disk drive .

...

...lightweight with reduced fabrication complexity. It has a near net shape, low rotational inertia, enhanced damping and high stiffness . It is electroconductive and does not require grounding pins during manufacture. It has better dimensional

Original Publication Data by Authority

Claims:

Claim 12. A method for creating an actuator E-block for a hard disk drive, comprising : (a) fabricating a yoke and a plurality of actuator arms from a solid material; (b) inserting the...
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